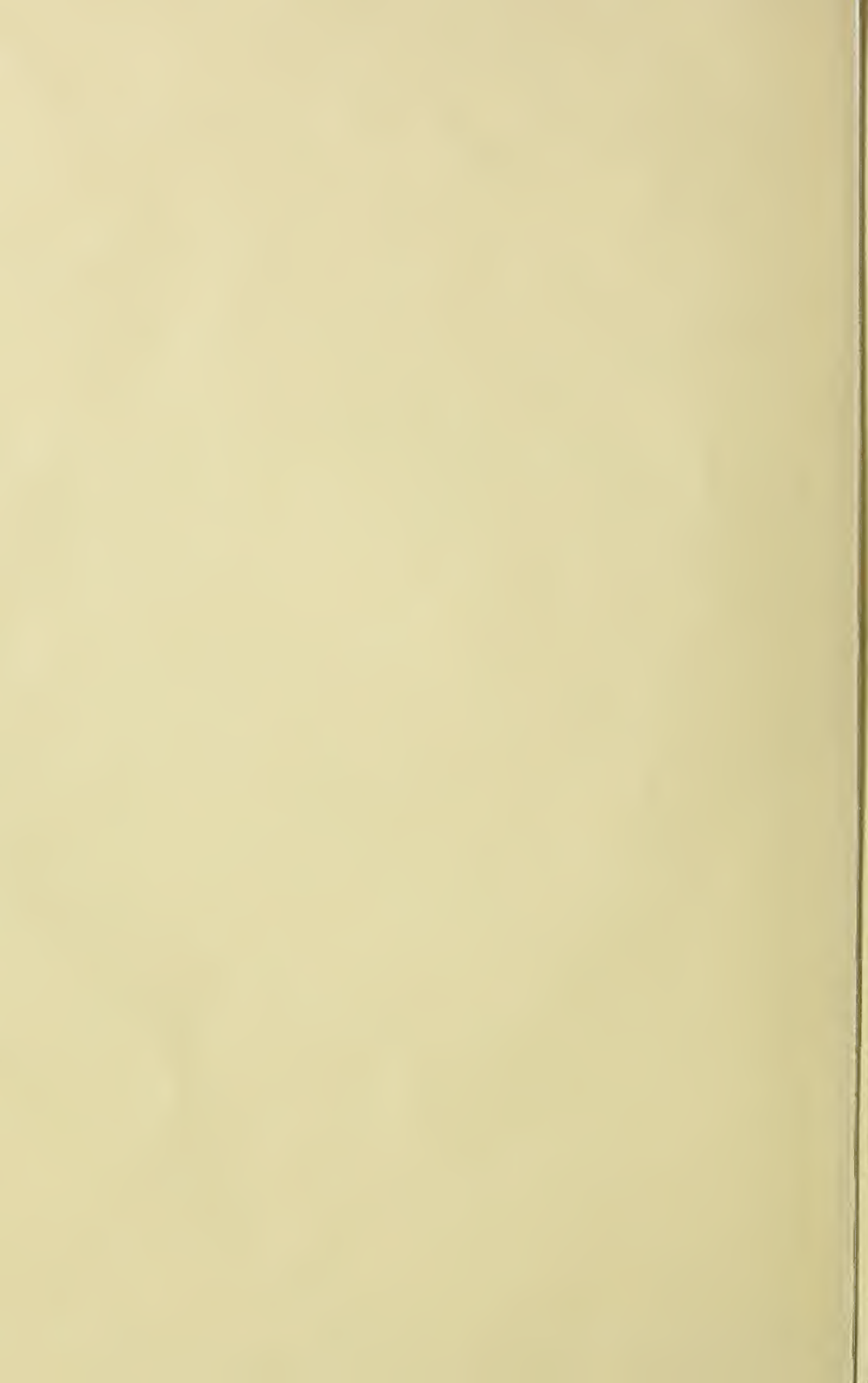


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THE
MARYLAND FARMER:
DEVOTED TO
Agriculture, Horticulture, Rural Economy & Mechanic Arts.

Vol. 7.

BALTIMORE, March, 1870.

No. 3.

HOMESTEAD PAPERS, No. 2.

THE COUNTRY HOUSE—PREPARATION FOR BUILDING.

The building site having been chosen the necessary preparations for the erection of the dwelling itself comes next under consideration. We propose to strengthen our suggestions in this respect by the aid of such extracts from the best authorities on the subject, as seem to us to be just and valuable. At the outset, however, we wish to dispose of the question of expense—that greatest of imaginary obstacles in the way of all improvements. A country house, or, to speak more directly to the purpose, a farm house of harmonious proportions, and which will form a pleasant object for the eye to rest upon in any landscape, need cost no more than an inharmonious and unsightly one. The difference is not at all a pecuniary one, but arises from a want of proper care and attention before building. As Calvert Vaux very truly remarks: "A simple well planned structure costs less to execute for the accommodation obtained, than an ill planned one; and the fact of its being agreeable and effective, or otherwise, does not depend on any ornament that may be super-added to the useful and necessary forms of which it is composed, but on the arrangement of those forms themselves, so that they may balance each other, and suggest pleasant ideas of harmonious proportions, fitness, and agreeable variety to the eye, and through the eye to the mind.—All this is simply a matter of study before building and not of additional cost in building."

To the same effect Mr. Downing remarks: "Most persons explain the fact that we in America so rarely see a satisfactory farm house by saying the farmer has no money to spare for ornamental decoration. * * * Beauty does not solely depend on ornament, and hence, a house may be tasteful without any additional cost by merely exhibiting good form." There is no reason, therefore, why beauty in simplest and least expensive proportions and harmonies should not be an attribute of even our humblest farm houses. We have been gratified

to notice of late years an effort in this direction.—

The desire for tasteful dwellings which has shown itself of late in our city and suburban residences, is influencing slowly, but perceptibly, the wider area embraced by the agricultural portion of our State. We find now more frequently than formerly, the dead uniformity of monotonous white discarded in the color of country houses and bits of neutral tint relieving and varying the aspect of our rural landscape. An attempt at ornamentation, which though as yet but slight, is an earnest of better things hereafter; testifies also to a gradual improvement in taste—neater lawns and a more abundant bloom of flowers give additional beauty to such houses, and lift their owners above the level of those who see no good in such things and still cling to the old careless ways and their household discomforts and inconveniences.

Assuming that the site for a new house has been chosen, upon what plan should the latter be built? In the first place it should be such as will be in keeping with the natural surroundings, and the situation in which it is to be placed, and so arranged as to plan as to be adapted alike to the formation of the ground and the comfort of the household.—On this head, Holly offers the following sensible advice: "We warn our readers against admitting any plan of a model house, or the design in some book, which there may present a pleasing exterior, without careful consideration of its adaptability to their grounds. Such designs may perhaps be suitable in every respect for their intended site, but when placed on a different one may be quite the reverse. In the one case the kitchen, hall, and minor offices may occupy the least desirable exposure, and obstruct no view, but by their position may shelter the house from wind and storm. In the other all may be changed, and none of the advantages of the new situation will be improved."

We do not imagine that the farmer will pay much attention to the particular style of his house—what he needs and seeks is a comfortable, roomy, durable dwelling. The house that will come nearest to his ideas must be without doubt built more or less on the plan of a square. It has become somewhat the

fashion, among those who can afford to construct more pretentious residences, to depreciate the square, sound looking, spacious dwelling, and to praise the superiority, in point of beauty, of the irregular style. The argument may be true in a special sense, for in the suburban cottages, near large cities, we see the striking effect of broken but harmonious lines. The improvement of a farm house is another thing however to that of the suburban or country cottage. The farmers' first idea should be a practical one. He should first consider what style of house combines the most conveniences and comforts, and at the same time is cheapest and is well within the capacities of country carpenters and builders. If the square plan suits him best in these respects there can be no reason why he should yield his preferences in favor of a more stylish and assuming structure to which his attention has been called in books which profess to teach him how, and where and why he should build. We by no means, be it remembered, advocate a perfectly square dwelling with unbroken roof, surmounted by stiff chimneys unrelieved by the faintest vestige of a porch and set out in some space bare or almost bare of trees and shrubs. We have seen such dwellings not unfrequently, and they certainly indicated a sad deficiency of taste on the part of those who constructed them, and those who were content to live in them. But even such a house is susceptible of being greatly improved by breaking the lines of the roof, by making the cornices massive, by putting simple hoods to the windows, and by throwing out in front a solid verandah in keeping with the character of the house, and especially by covering the verandah with honeysuckles and climbing roses.—These simple additions, with a well kept lawn and shrubbery, neat walks, and a few groups of deciduous trees would add beauty even to the plainest house and grace to its surroundings.

EXTRAORDINARY ROOT SPECIMENS.—We glean the following from *Jackson's Oxford Journal*, England, from a description of the Smithfield Club Cattle Show, held in December last, at the Agricultural Hall, Islington. The English may not have a Niagara, but they have some Mangel Wurzel:

At Messrs. Sutton's stand were some of the most extraordinary specimens of Mangel Wurzel ever exhibited; they were Sutton's Mammoth Long Red, and weighed upwards of 40lbs. each; although of this enormous size they were of most symmetrical form and of very fine quality. All the Roots on this stand were grown by Messrs. Sutton's customers, and were much in advance of any previous year; and the Sutton's Champion Swedes, weighing 18 pounds each; Yellow Intermediate Mangel, weighing 28lbs. each; Berkshire Prize Yellow Globe, weighing 30lbs. each; Green Kohlrabi, weighing 20lbs. each; and Ox Cabbage, weighing 50lbs. each, were specially worthy of notice.

DAIRY FARMING.

We have frequently called the attention of our agricultural friends to the advantages of Dairy Farming. When we say dairy farming, we refer to either one of three points—the production of milk for sale in large cities, the production of butter as a special business, or the manufacture of cheese as another and distinct branch of what may be termed dairy farming. To those who live within easy distance of populous cities, the milk dairy will generally prove the most profitable, if the facilities of access to the city be good, and occupy but a short time either by turnpike or rail, or water carriage. The demand for good pure country milk is such that the supply of that article is rarely, if ever, in excess, whilst the price which it brings of late cannot certainly fail to be remunerative when the business is pursued with intelligence and economy. The milk from slop fed cows housed in the suburbs of a city, is never desirable at the best of times, and in some instances is known to be very deleterious, especially when given to young children. But pure country milk is as wholesome as it is nutritious, and a dairy farmer who has once established his reputation for such an article may command any number of ready customers.

So also with the production of butter. The vast amount of indifferent butter brought to market during the year, white, cheesy, and easily turning rancid, is well known to all housekeepers—and yet, even such butter sells higher than it ought to do, when we take in consideration its inferior quality, and the slovenly manner in which it has been made. Butter of a fine quality, firm, rich, sweet and luscious in taste is rare indeed, and invariably brings the very highest price. Whilst other butter is selling for forty cents a pound, such butter as we refer to will easily bring sixty cents, and housekeepers will gladly enter into an agreement to take it at that price all the year round. At this time second quality fresh butter sells for sixty cents a pound, yet we know some farmers who get eighty cents a pound for all the butter they can make. The difference lies of course in the better management of the cows, and in the greater care and skill observed in making the butter. But butter even at forty cents a pound, in the summer, and sixty cents in the winter, or in other words, at an average of fifty cents a pound all the year round, will pay and pay well, and it is astonishing to us that so few persons enter largely into a business that brings in a steady return of money, week by week, and has not the precariousness of farm crops whose profits can not be ascertained until the season is over and the grain is thrashed and taken to market.

We now turn to the manufacture of cheese. In regions where large quantities of land are devoted to grazing purposes, and in populous neighbourhoods where supplies of milk can be sent regularly to the cheese factory by farmers living in the vicinity, the manufacture of cheese may be carried on to any extent, and with the experience which has already been acquired in some quarters in respect to the best method of making it, the occupation has become quite a profitable one. Moreover, the production of butter and cheese can be carried on to great advantage at distances remote from the larger towns, and in places where land is cheap, and where the dependence on facilities of transportation is much less than in the case of milk. The latter must be sent to town every day, and must reach there on stated hours, but butter need not be sent there more than once, or at the utmost more than twice a week, whilst cheese may be forwarded at any time that the state of the market may render most advisable. Again, a milk dairy involves the largest outlay for the wages of hands, and the greatest trouble in feeding, milking, and forwarding to market, and hence, the profits must be commensurate to make up for the labor and expenditure.—A butter dairy requires a simpler routine, but it likewise requires, in addition to extreme cleanliness, that sort of skill and thoroughness of manipulation which will ensure, invariably, the production of a superior article. To make good cheese is also a simple matter when the details of the business are once learned. But where cheese making is to be conducted on a large scale, and to meet, not only the wants of the home market, but the growing demand for export, the capital invested in the business must be considerable because the returns are slower.

But grant that the profits of a milk, or butter, or cheese dairy should turn out to be comparatively small—which with good management is not likely to happen—there is still this other and important consideration to be looked at when we come to count up the advantages of dairy farming. It is the most economical mode of bringing up poor or partially exhausted lands to a condition of the very highest fertility. The manure made on a dairy farm counts annually by the hundreds of loads. Its application to the soil, year after year, increases the acreable value of the farm—and thus, whilst the profits of the dairy supports the family of the farmer, he is funding other profits in the marked improvement of his land.

DR. VOELCKER says: "Placed in a heap with ashes or sand, occasionally moistened with liquid manure or water, bone enters into putrefaction, and becomes a more soluble and energetic manure than ordinary bone dust."

Our Agricultural Calendar.

Farm Work for March.

The fact that the winter has been an unusually mild one affords no certain evidence that the spring season will open early. Indeed, there are some weather prophets who predict a late spring and a cool summer as consequences of the extremely moderate weather of the winter. We do not propose to indulge in any speculations in regard to the matter. It is very clear to us that whatever the character of the season may be, it is incumbent on the farmer to be prepared to commence operations as early as he can possibly do so. As a rule, the earlier the spring crops can be got in so they may have the advantage of the usual rains, the more certain, if the soil is in good condition, will be the prospect of a good yield. But whilst we cannot command the weather, we can at least be prepared for contingencies, and assuming, as we have a right to do, that the proper season for ploughing and seeding will come in due time, every effort should now be made to take advantage of it as soon as that time arrives. There are one or two points, however, which we desire earnestly to press upon the attention of our friends, and they are these. It is false economy to break up more land that can be cultivated thoroughly and with ease, and is also futile to expect to make good crops unless the soil is in good condition to bear them. The greatest cost in cultivating land lies in the labor that is expended upon it. True economy as well as true policy would therefore suggest a concentration of manures, where manure is needed, upon a smaller number of acres, and a concentration of the labor of the farm upon those acres. These are axioms that admit of no refutation. Another axiom especially applicable to our climate, is to keep the vacant land well covered either with clover or the finer grasses, as an exposed soil is always subject to waste even if it remain for years untouched by the plough. The work for the month is as follows:

OATS.

Properly managed the oat crop can be made, if not as profitable as some others, yet sufficiently so to afford a fair return for the labor expended on growing it. It has been too much the custom to relegate oats to the poorer fields of the farm, and the result has been an indifferent yield of a really valuable cereal. On heavy lands naturally fertile, or made so by the application of manure, forty bushels of oats to the acre may reasonably be expected. As a rule not more than half that quantity is harvested south of the Susquehanna river. In Pennsylvania, and further to the north, they man-

age this crop better, and are therefore better paid for the labor expended on it.

Soil and Preparation.

The soil best adapted to a vigorous growth of oats is, as we have said, a heavy clay loam; light sands are the worst of all. Meadow lands carrying a good sod, freshly turned and put into oats, will yield the heaviest crop of oats, and the reason is obvious enough when we see by the following analysis what the principal constituents of the straw and grain of oats are.

The oat contains 100 parts:

	Grain.	Straw.
Potash	12.09	24.05
Soda	00 00	4.04
Lime	3 07	8 53
Magnesia	7 07	3.08
Phosphoric acid	14.09	3.00
Sulphuric acid	1.00	4.00
Silica	53.03	40.00
Chlorine	00 05	4.07
Iron, carbonic acid & loss.	6.60	8 03
	100.00	100.00

Here, then, we have in by far the largest proportions three *prima* constituents, viz: Silica, Potash and Phosphoric acid, or in other words Phosphate of lime. The silica constitutes 45 per cent. of the grain and straw combined, and this is to be obtained from the decaying sod when sod land is turned under. Potash and phosphate of lime are also derived from the same source, and thus the advantage of sod land for oats is explained. But silica being a common constituent of all soils, and especially those containing more or less sand, the principal ingredients that are absolutely required to be present in the soil are potash and the phosphates. The one can be furnished by wood ashes, the other by an application of bone dust. In soils long under cultivation these constituents, which are drawn upon by all classes of cereals more than any other sort of plant food, are among the first of which the soil is exhausted, and it is therefore necessary, wherever they are deficient in quantity, to supply them. This may be accomplished by the application of either of the following mixtures to each acre in oats.

Mixtures for Oats.

No. 1. Five two horse loads of stable manure.—Ten two horse loads of woods' earth or marsh muck, five bushels of wood ashes—three bushels of ground bones—one bushel of common salt—one bushel of plaster.

No. 2. Eight bushels of bone dust—ten bushels of wood ashes—two bushels of salt—one bushel of plaster.

No. 3. 250 lbs. Phosphate of lime—ten bushels of wood ashes—two bushels of coarse salt.

No. 4. Ten two horse cart loads of stable manure—four bushels of ground bones, or its equivalent

of super-phosphate—five bushels of wood ashes, (ten would be better)—one bushel of salt, and one bushel of plaster.

Either of the above should be well mixed together, sowed broadcast and ploughed in.

Time of Sowing.

Sow as soon as the frost is fairly out of the ground and the soil is sufficiently dry to break down well.

Quantity of Seed to the Acre.

From two to three bushels sown broadcast and harrowed in. Grass seeds may be followed to advantage, and the work finally completed with the bush harrow and the roller.

SOWING CLOVER SEED.

Occasionally there are excellent opportunities in February when clover may be seeded on winter grain. But if the seeding has been deferred, as is most likely, the earlier the work is done in March the better chance there will be of getting a good stand.

Quantity of Seed to the Acre.

One peck of clover seed to the acre is not too much—if clover is to be seeded alone. It is always better however to sow also orchard grass, which is a strong and thrifty plant, and matures about the same time as clover. In that case sow 12 lbs. of clover seed, and not less than one bushel of orchard grass seed. Harrow the land if the soil is open and dry, and follow with the roller.

PREPARATION FOR CORN.

When the oats are all in, the next work to be done is to prepare for corn. Whenever much barn yard manure is to be hauled out the process of hauling occupies considerable time, especially if the fields lie at a distance from the barn yard. The sooner therefore the work of haling is commenced, the more rapidly the subsequent operations can be carried out.

As to Soil.

A light loamy soil very fertile naturally, or made so by the application of domestic or commercial manures, is by all odds the best for corn. The heaviest crops recorded, with the exception of those grown on small pieces of land for experiment, have been those on alluvial bottom lands. But whatever the soil, it should be rich, deeply ploughed, and made as light as possible. These conditions are essential to success in growing heavy crops of corn to the acre. It is for this reason that meadow lands of light texture, in which the grasses require renewing, yield heavy crops of corn if liberally manured on the sod and well ploughed and harrowed. Of the after culture we propose to speak when the season for planting approaches.

BARLEY.

Barley grows best in a rich, light dry soil, in which sand predominates. Such a soil should be

ploughed deeply, and thoroughly harrowed, taking care that the seeding occurs when the land is perfectly dry. Barley germinates readily, and will speedily appear above ground after the first shower. It is somewhat remarkable that this crop, which if properly cultivated will pay an excellent profit, is so little grown at the South, now that the demand for barley has become so great for malting purposes, and the price is so high.

Quantity of Seed to the Acre.

From two to two and a half bushels of barley to the acre should be sown.

MILCH COWS, &c.

Milch cows, as also heifers and all working animals require special attention during this month.

EARLY POTATOES.

Those who desire to assure, under favorable circumstances, a good crop of early potatoes should be ready to plant the sets as soon as the frost is out of the ground, and the land is in fit condition for the plough. A good sod sprinkled with manure and ploughed well under is an excellent preparation for the cultivation of the potato. Where a sod is not available a dressing of wood ashes will be found of great advantage. Plough the soil very deep, make it as light as possible by frequent harrowing, taking care in sod land not to disturb the sod. Run the furrows as deep as is admissible, laying them off about two feet and a half apart, strew in the furrows thus opened, a liberal quantity of long manure, which would be improved by also dusting it with wood ashes. The sets should be cut large and from large and well grown potatoes. Spread them for a short time on the barn floor to dry, but not too long or they will shrivel—or else dust them with plaster of Paris, and drop them on the manure along the drill six inches apart, and then cover with two bouts of the plough. When the plants come up dust them with a mixture composed of four bushels of wood ashes, one bushel of slacked lime, one bushel of salt, and one bushel of plaster—repeating the same process after each hoeing. For the after cultivation keep the vines earthen up well, destroy all weeds, and loosen the soil between the rows with the shovel plough and the cultivator.

FENCES.

Examine these and repair them where repairs are needed.

ORCHARDS.

Trim out all dead wood. Dress any fresh wounds made by such cutting with a mixture of cow manure and lime, or cover them with a varnish to keep out the air and wet—manure and dig around them as advised last month.

Planting out Orchards, Shrubbery, &c.

This work should now be done at once, or it will be too late to take advantage of the season.

Garden Work for March.

We cannot resist urging all who desire to have an ample supply of vegetables, to go to work at once and get the garden in order. The economy of vegetable food, not less than its healthfulness in the summer season, when less meat should be used, commend the products of the garden to especial favor, and also to especial attention.

Sowing Seeds.—For open air seeding, choose a good warm south border, well protected on the north and west, and there prepare a bed for sowing such seed, the plants of which may be required when the season arrives for pricking them out. Dress the bed liberally with rich and well rotted manure, spade the soil deeply, breaking down all clods and rake thoroughly. When this has been done, draw drills six inches apart and from a quarter to half an inch deep and seed therein, the seeds of early Cabbage, Tomatoes, Lettuce, Radish, &c. When the plants come up water them of an evening, in dry weather, with water that has been tempered by standing in the sun all day.

Early Peas.—Immediately the frost is out of the ground, select a warm portion of the garden and drill in a few rows of early peas—make the drill four feet apart, and three inches deep. Sow the peas thickly along the drills, cover them well with earth and pat down lightly the crown of the ridge, with the back of the spade. When the peas are a few inches high hoe earth to them and support them with sticks.

Plants in Frames.—See that these have an abundance of air to strengthen them in warm days.—Water them with tepid water of evenings, and cover with mats at night so long as there is any danger of frost.

Bunch Beans.—A few rows of Bunch Beans may now be planted.

Early Spinach.—Make the soil very rich with manure, dig and rake it well, and drill in a few rows of Spinach. Make the drills twelve inches apart, and then seed about an inch deep in the drill.

Carrots, Parsnips and Beets.—For an early crop of these roots, choose a warm part of the garden. If manure is required it should be well rotted, but any of the better sort of ammoniated phosphates will answer the same purpose. The rows for Carrots should be about ten inches apart and one inch deep. The rows for Parsnips should be at least one-third wider apart, and for Beets, double the distance of Carrots. Cover the seeds with a rake, and press the soil about them with the back of a spade.

Small Salading.—Sow small salading at intervals of a week apart throughout the month.

Celery.—Prepare a warm border for the reception of celery seed, for transplanting.

Siberian Kale.—Spade a small bed and manure it well and sow the seed of Siberian Kale for sprouts.

Asparagus.—Clean off the old beds and fork into them some well rotted manure, then broadcast them liberally with salt. New beds may also be set out early this month, or the seed may be sown.

Sowing Onion Seed.—Drill in Onion seed early this month.

Red Peppers.—It is rather early for peppers but the seed for a first supply may be sown in a warm border.

Early Potatoes.—Get these in as soon as the frost is out of the ground. For further information see Farm Work.

Rhubarb or Pie Plant.—These plants may yet be set out or new beds formed for raising them from the seed.

Gooseberries and Currants.—This month new plantations of Gooseberries and Currants may be made, or cuttings set out. It is also at this time that the bushes already in bearing should be carefully pruned and dug about.

Raspberries.—Trim these, loosening the earth about the roots. Throw a shovelfull of earth around each and tie up to stakes.

Strawberries.—The Strawberry beds should now be carefully attended to. They should be cleaned of all weeds and refuse stuff. After thinning the plants out, dress the bed with well rotted manure, and woods earth, or with latter alone, as manure is apt to cause the plants to run to vine. Spread between the rows either straw or tan, and sprinkle wood ashes over the bed. Water freely during the dry season, and even during the period of blossoming, taking care however that the watering is not done until after sun set.

EAST INDIA COTTON.—We are sorry to learn from the report of Mr. Forbes, cotton commissioner, that there is an increase of nearly a million acres in the area of cotton cultivation in Western India this year as compared with last. We are sorry to hear it, because increase of cotton culture means famine. A million acres more given to cotton means a million of acres less given to grain. The equilibrium of supply and need in the matter of grain has always been so very delicate that the least disturbance entails a famine somewhere. Since the great stimulus given to cotton culture seven years ago, there have been famines in Madras, Orissa, the central provinces, the northwest provinces, Rajputana. We have not yet any very serious or general famine in this presidency; shall our turn come next?—*Gazette, Bombay, India.*

COTTON SEED MEAL.

A correspondent, "Ex-Planter," in *Colman's Rural World*, thus writes in regard to his experience in feeding cotton seed meal:

I lived on my plantation in Hinds County, east of Vicksburg about 11 miles, for some thirty-three years. I have known stocks of cattle, of all ages, to have free access to cotton seed, and a vast many of the (careless) planters permitted seed to rot and waste around gin-houses, not even using the article as manure. Where the seed could be got to by the stock, they ate of them day and night, and I never heard of cows slipping their calves from that cause; sometimes it did occur, but as often when not fed on seed. For many years (probably some 20) neither cattle nor hogs got to my seed—they were husbanded; yet I fed milch cows on cooked seed every winter. Living on my plantation from 1830 to 1863, my cattle if injured at all, it was because they did not get it. I restricted mine, because when free access was had the quantity of oil in the seed, purged, instead of fattened, and the milk I imagined was poorer. I think two quarts night and morning of cotton seed meal, scalded and mixed with oats, chopped hay and straw, would do better than a peck. We have had visitors from the east, north and west, at our table, and our butter was always remarked as extraordinary for the South, because we fed our cows regularly with cooked food—cotton seed, corn meal, sweet potatoes, pumpkins, &c.—with dry food, always portions of the first.

Still cotton seed meal may be an evil, when the seed would not. The meal may, in some way, become mouldy, and, possibly, poisonous—but if no extraneous matter, I would not hesitate to feed to cattle—and I believe it would be fine food for horses, of course in proper quantity. * * *

Cotton seed meal is used largely in Europe, and many experimenters say it is more valuable than linseed cake. The difficulty is—the quantity.—When cattle learn to eat it, they use it as it is said the Irish children do whiskey, for bed and board.—Use it as those conversant with linseed do—and I warrant no harm.

Please let me say to your Chairman, my brother chip—that it is all "bosh" about the shell around the kernel doing so much evil; it is as indigestible as post-oak bark truly; will not rot in the earth if in quantity for months. Before the seed is pressed for oil, the "shell" is removed, and perhaps in 1,000 pounds of meal there is not 1 pound of hull.

I am interested in this. We lose the value of this here as food and as manure. I would have it do good. Examine if not musty—fermented so as to form some fungus, or fungoid. If pure, feed say about one-quarter the weight of a feed of corn, with oats in sheaf cut fine and dampened with a weak brine, or better all steamed. I cannot think that four quarts, with an abundance of chopped oats or rye, and wheat straw or hay wet with salt and water, twice a day, will do harm; it will increase the richness and quantity of milk.

KENTUCKY BLUE GRASS.

This grass, which constitutes the glory of Kentucky pastures, is regarded superior to all others for grazing; and, what adds more to its great value, it grows with such luxuriance on lands necessarily retained for timber, which, without the grass, would yield no annual return beyond the value of the timber removed from them.

The system of converting these woodlands into productive pastures, was introduced into Kentucky, in the counties of Benton, Clark, and Fayette, over 60 years ago, by emigrants from the south branch of the Potomac. This system extended gradually, until it embraced a considerable portion of the State, and it is now beginning to constitute an important feature of farming in many other States. It is equally applicable to all the rich calcareous soils of the West; and we hope soon to see the undergrowth in the majestic forests of Missouri, and other States removed, and the lands yielding rich returns from these unrivalled pastures.

Preparing the Land and Sowing the Seed.—Where timber is an object, the important point to be considered is, to admit into the enclosure the greatest amount of sun consistent with the preservation of the valuable portions of the timber. Various methods have been adopted in Kentucky, according to circumstances, in preparing these woodland pastures; some cut out the undergrowth and fire-wood, and then sow the seed; others belt the timber one season, and clear out the undergrowth, and then sow the ensuing winter; this latter method is the most expeditious, and requires the least labor. After the undergrowth is removed, the leaves should be gathered up, so that the seeds may come in contact with the moist soil; some gather and burn it, but we prefer to gather it into heaps, and let it lay upon the land. This may be done, and at the same time leave the ground in the best possible condition to receive the seed, by the use of a scraper. This is made in the following manner: Take a piece of plank five or six feet long, and about two feet wide, insert therein, at right angles, a common ox-tongue, and attach one yoke of oxen and one horse to it.—With the aid of one man, six or eight acres can be scraped over in a day, jumping the most of the logs with ease. The leaves are gathered into piles, leaving the surface of the ground clear and smooth, and ready for the reception of the seed. It is best to have one man follow, and sow the seed as fast as the ground is cleared. The seed may be sown at any time from November to April; but the best time for sowing is in January or February, and under the operation of the weather, the seed will penetrate the earth more readily, and it will vegetate the first season.

Quantity of Seed.—From ten to fourteen pounds of cleaned seed should be put on an acre. Some farmers add to this three or four pounds of Timothy seed.

Blue grass is very delicate the first year, and it should be sparingly pastured until it has gone to seed, or it is liable to be pulled up with the roots.

Blue grass is an excellent renovator for open, worn lands; when sown upon cleared land, a mixture of timothy and clover seed, in the proportion of three or four pounds of each to ten or twelve pounds of cleaned blue grass seed is preferred. The advantage resulting from this is, it secures at once a well covered pasture that will bear a considerable grazing the first year; the blue grass will soon expel the clover and timothy, and take full possession of the ground. Open grounds are usually sown in March, upon wheat, rye or oats.—*Colman's Rural World.*

RECLAIMING OLD PASTURE.

Renovation of an old hill pasture by Professor Johnson, of Yale College. This pasture had once been—twenty years ago—in tolerably good condition; but when the work of restoration commenced, ten years ago, the field was unproductive, and almost covered with low bushes and mossy growth. The bushes were cut, drains established, and lime applied at the rate of 150 bushels per acre in the autumn and winter. In the following spring the surface was scratched with a fine-toothed harrow, red-top seed sown, and a light dressing of phosphatic guano (250 pounds to the acre) applied. The field contained from five to six acres, and, before the dressing, offered scant pasturage for one cow. In the season of 1868 it afforded abundant pasturage for five cows, the growth being mainly red-top and white clover. No further dressing has been applied. Weeds and scattered woody growth are annually cut off in August, and a good coating of grass is left for winter protection. No grazing is allowed after the 25th of October. In commenting on the course pursued, Professor Johnson remarks that the pasture had evidently been slowly undergoing a change in its chemical constitution—hardening in some such manner as “hard-pan” forms in ocherous soils. The earth being compacted also by the tread of cattle around springs which existed on the slope, the flow of water was checked and the soil became moist and spongy. The remedial action of the lime was both mechanical and chemical. The soils of the neighborhood are ferruginous, and the opinion is expressed that the hardening of the land had, for the most part, been caused by the existence therein of oxide of iron and of acids resulting from a peaty decomposition of vegetable matter.

THE TERRIBLE TRICHINOSIS.

John C. Dawson, M. D., Professor of Physiology and Microscopic Anatomy, publishes a long and exceedingly interesting paper on this subject, from which we make the following extract:

The pig seems to be the animal naturally the most liable to trichinosis. He is certainly more liable to this disease than any other animal used for food, neither the sheep nor the ox being subject to it. It has been found in this country, by investigation in Chicago in 1866, that of all the pigs brought to market in that city, one in fifty is infected with trichina. This shows that we are all in danger of becoming infected by the use of pork, unless measures be taken, in preparing the meat, to destroy the vitality of the worms. Smoking and salting will not do this effectually. Only thorough cooking is to be relied on as a safeguard. It is remarkable that most, if not all of the cases of trichinosis in this country, thus far, have occurred among the Germans. This is because they have the habit, not otherwise common here, of eating ham, sausages, and even sometimes fresh pork, nearly or quite in the uncooked state. To kill the worms the ham must not only be salted and smoked, it must be cooked and cocked thoroughly. Now, if you bear in mind that one pig in fifty is infected with trichina, you will perhaps think many times before putting between your lips a piece of pork, or ham or sausage in the raw state; you will be certain that it is cooked; and not only that, but thoroughly cooked. One of the worst cases of trichinosis that has come under my observation was caused by eating pork chops which were rare or slightly underdone. Now, these chops were probably well enough cooked on the outside; but on the inside they were red and juicy, and the danger was precisely the same as if the patient had taken the meat entirely raw. In order to destroy the vitality of the trichina the meat should be subjected to a temperature of 212° F. Now, if you boil a ham for half an hour, or even an hour, you do not necessarily subject all parts of it to this temperature. In the central parts of the ham the temperature will not rise to that point unless the boiling has been long continued. I speak of this particularly, as it is a very important matter. A temperature of less than 160° F. does not destroy the trichina. As shown by direct experiment, therefore, a piece of trichinous meat, any part of which has not been raised to or above this point, is just as dangerous as if it were taken in the raw state.

These are the chief points of importance in regard to the trichina and trichinosis. The disease is fatal enough, frequently enough, and revolting enough to induce us to take all possible measures to prevent

it, and I do not think anything is sufficient for this but a personal examination of every piece of pork, ham, bacon or sausage used as food, to see that every part of it has been subjected to a thorough cooking process.

There are other hints of considerable interest with regard to the rapidity with which the human subject may be infected, the great number of persons who may become infected by eating the product of a single slaughtered animal, and the degree of fatality attending the disease. Enough, however, is known to convince us that the affection is a very frequent one, and liable to be exceedingly fatal, or if not fatal, to produce prolonged and exhausting disease.

Uses of Rawhide.

THE SKIN of an animal, whether cow, calf, colt, or horse, that dies on the farm is worth more at home than at the tanner's. Cut it into narrow strips, and shave off the hair with a sharp knife before the kitchen fire, or in your workshop, stormy days and evenings. You may make them soft by rubbing. A rawhide halter-strap, an inch wide, will hold a horse better, and last longer, than an inch rope. It is stronger than hoop-iron and more durable, and may be used to hoop dry casks and boxes, and for hinges.

Try it on a broken thill, or any wood-work that has been split. Put it on wet, and nail fast. Thin skins make the best bag-strings in the world. A rawhide rope is a good substitute for a chain. It is valuable to mend a broken link in a trace-chain. For some purposes it is best to use it in its natural state. For other purposes it may be dressed soft.—*Facts for Farmers.*

DEODORIZING STABLES.—Sawdust, wetted with sulphuric acid, diluted with forty parts of water and distributed about horse-stables, will, it is said, remove the disagreeable ammoniacal smell, the sulphuric acid combining with the ammonia to form a salt. Chloride of lime slowly evolves chlorine, which will do the same thing, but then the chlorine smells worse than the ammonia. Sulphuric acid, on the contrary, is perfectly inodorous. The mixture should be kept in shallow earthenware vessels. The sulphuric acid used alone, either diluted or strong, would absorb more or less of the ammonia, but there would be danger of spilling it about, and causing serious damage; and besides this the sawdust offers a large surface to the floating gas. The experiment is easily tried, and it may prove successful.

D. D. T. Moore, of the *Rural New Yorker*, made his editorial staff Christmas presents of \$1,000 paid up life insurance policies.

Horticultural.

THE CULTIVATION OF SMALL FRUITS.

By D. McLAURY.

READ BEFORE THE MIDDLESEX FARMER'S CLUB, NEW BRUNSWICK, NEW JERSEY.

Mr. President: The constantly increasing demand for small fruits, and the idea that it pays better than general farming, has prompted many of the most active and enterprising farmers to devote much attention to this subject. There is at the present time, in our State and in this county, a large amount of capital invested, and much valuable land devoted to the culture of small fruits. Some have succeeded and others failed.

Too many appear to think it is all profit and no expense; but a large number, after a few years careless experiment, change their minds and think it is all expense and but little profit. It is by earnest perseverance that we succeed. The fruit grower who is successful must be wide awake, and keep himself posted with respect to the kinds of fruit for which there is the greatest demand, the soil best adapted to its culture, and the most economical way to cultivate.

This is a pleasant and delightful business for a person possessed of an inquiring and progressive mind; but he who would plod along in a careless way, without energy enough to use either his hands or his brains, both of which are necessary, had better let fruit growing alone, and devote himself to some business that does not require so much attention.

With respect to soil for strawberries, raspberries or blackberries, I prefer a clover sod on a heavy sandy clay loam, plowed in August or September, previous to planting the fall or spring, or else a corn stubble, which was a heavy clover or timothy sod the year before planting the corn.

Let the ground be as thoroughly prepared as for an extra crop of wheat. Night soil and good stable manure are perhaps the best manures to use. There is little danger of forcing the Wilson strawberry, or the Black Cap Raspberry too much. Strawberries should *always* be planted in the spring, but raspberries and blackberries late in the fall or *very early* in the spring. I prefer fall planting, if each hill can be covered with a fork full of litter from the horse stable.

There are only a few varieties of strawberries worth growing for market. I think, at present, the Wilson is decidedly the most profitable strawberry for us to grow for market. It is the best to ship, the best to can, and the best to preserve,

I believe an acre of Wilson's in good condition, will bring more money than an acre of any other variety not receiving better care than the Wilson. For the last few years the cut-worms and grubs have destroyed a great many plants; therefore I think best to let the plants run over the ground.

I set the plants every twelve or fifteen inches, in rows about three feet apart. The field can then be worked with the cultivator and hoe till plants interfere, late in the season, when the hoe only can be used.

The crop is often increased twenty-five per cent. by light mulching, in November or early in December, with litter from the horse stable (which is the best,) straw, salt hay, corn-stalks, or any material that will partially protect the plants during the winter, but which should be carefully removed from the crowns in spring.

As it generally costs less to cultivate a new field, than to clean out and keep in order an old one, where ground is in a high state of culture, I think it pays best to take extra care of the plants the first summer, picking off all the blossoms, which strengthens the plants and causes them to throw out more and stronger runners, and to form larger stools; and then, the next summer, pick the fruit and turn under the field. Those who raise small berries on poor ground, where weeds and grass are no trouble, do not have to replant so often. The demand now is for large berries, and there is no use in bothering with small ones. A quart of large berries, with the hulls on, will bring, in a good market, more money than a quart of small ones with the hulls off, while costing less for picking.

The next in order is the Raspberry, which begins to ripen before the strawberries are gone. Some of the best varieties of the red raspberry are the Clarke and Philadelphia, and of the Black Caps, the Davison's Thornless, Doolittle, Miami, Mammoth Cluster and Seneca.

The Clarke is decidedly the best red raspberry, but the Philadelphia the most prolific.

Some claim that the Davison's Thornless ripens earlier than the Doolittle; if so, it will interfere with strawberries, and come into market too soon. It is my experience that it ripens about the same time as the Doolittle, but is no better berry, is a weaker grower, and much less prolific. The Miami and Seneca begin to ripen about ten to fourteen days after the Doolittle, and are very strong growers, prolific bearers, and fruit of good quality, the color of the Miami is dark brown. The Seneca is jet black, flavor excellent, but I think the berry not quite so large as the Miami.

I doubt if the Mammoth Cluster, about which so much noise has been made the past year, is much, if

any, superior to the Miami. I plant the Red raspberry about four by six feet, and the Black Caps about three or four feet by seven, according to state of culture. The second spring I prefer to set posts and draw a No. 10 wire two and one-half or three feet high over each row, and as soon as the young cane reaches the wire, fasten it and pinch off the top, which forces out the laterals near the ground, which I think a great advantage. In pruning these canes the third spring, I cut back the laterals from one-fourth to one-half the length. If the plants are large and fine when set, quite a crop may be picked the second summer. One of my neighbors, this season, picked about fourteen hundred quarts from an acre, by trying to stalks the canes of the first summer's growth.

Another had several hills two or three years old that averaged two quarts each. If a field averages two or three quarts when in full bearing, the crop is a very good one. There is, perhaps, no crop which pays better for mulching with salt hay, corn stalks or straw, than the Black Caps, but a very good mulching is thorough cultivation with the plough early, and then the cultivator and the harrow till the berries begin to ripen; as part of the raspberry roots lie quite near the surface, the ploughing and cultivating should be very shoal.

The ground should be worked up to the Black Cap canes, because each year new roots are sent out above the old ones. In this respect they grow very much like the strawberry. In setting the Black Caps, after the land is furrowed the wide way, and marked the other way with a chain or something else, the one who sets the plant should form in the furrow a little mound, like an inverted saucer, spread the roots over this and cover the crown of the plant only one or two inches deep, and so that the surface of the ground is left even.

Many plants never reach the light, because planted too deep. Set none but good, strong, healthy plants, for the first crop will often pay several times for extra expense.

I think the best blackberry for market is the Wilson's Early, which begins to ripen before late raspberries are gone, and matures before peaches are largely in market.

It is quite a prolific bearer, holds its color well, and is firm enough for shipping. As we have doubts as to the perfection of its blossoms, I think best to plant every fourth or fifth row with Lawton's. If my whole crop of blackberries, this season, had been Wilson's, it would have returned several thousands of dollars more. The Kittatinny is perhaps, more hardy, and is a very rank, strong grower, but not a very prolific bearer. It ripens about the same time as the Lawton, and does well to market at home on the day picked, but is too soft to ship. There is no doubt but the Lawton is very profitable when not

winter-killed, and when peaches are not too plenty.

I plant blackberries four feet apart, in rows eight feet wide. A row of vegetables may be grown between during the first summer.

When the land is rich and under high cultivation, the canes generally need support, which is best given by stretching wire about three or three and one-half feet high, to which the canes can be fastened. The top of the young cane should be pinched off when three or three and one-half feet high, which forces out laterals and gives the shape of a dwarf tree. In the spring the laterals should be pruned off from one-fourth to one-half, which is a work requiring much experience to do properly. If a very vigorous growth of cane is pruned too much, the fruit buds instead of throwing out a single fruit stem to bear one cluster, will often send out a small fruit lateral, the berries of which will ripen from ten to fourteen days after the first crop, and be of little value in the market. I could show you three fields of Lawton's near each other and owned by different men, which showed the difference in pruning. The first was well pruned and ripened well; the second, which was partially pruned, matured part, and the third, which was left nearly as it grew, perfected still less. The dry weather, while the berries were ripening, affected the comparative result.

Those who would be successful in growing blackberries, must be careful not to run to either of the extremes of pruning—too much or none at all. I usually prune in the spring, after the buds begin to swell, because the cane cuts more easily and dead wood can be more plainly seen. In the spring plow from the rows shoal, so as not to hurt the roots, and then, if the fruit growers will, each year, or every other year, apply broadcast to his raspberry and blackberry fields the same amount of fertilizer required to grow a good crop of wheat, he may expect much larger returns than from any grain crop. The ground should then be plowed back to the rows. I prefer a digging fork for working in the row among the canes to any other tool—a prong hoe is liable to go too deep and injure the roots. After the spring ploughing the ground must be kept thoroughly worked with a cultivator and a small harrow, till the fruit begins to ripen. The harrow and cultivator must not run so deep as to injure the roots. This work should be done only by careful men who understand it. We can't expect to grow a large crop of berries and a large crop of weeds at the same time. Those who try usually succeed best with weeds. We ought not to expect more than three or four large crops from a raspberry plantation, but it is difficult to tell how long a field of blackberries will last if they are well cultivated. I have one field, set in 1858, which bore a fine crop this last summer. The

canes are more liable to winter-kill in an old field than in a new one.

Thinking it might be interesting to you, I have made an estimate—not by guess, but by net sales—of the average prices, per quart, of my berries for four years. By net sales I mean returns after deducting freight, commission, etc. In 1866, strawberries averaged 19½ cents per quart, raspberries 24 1-5 cents, blackberries 21½ cents; in 1867, strawberries 7½ cents, raspberries 20 cents, blackberries 9 1-5 cents; in 1868, strawberries 7 3-10 cents, raspberries 31 cents, blackberries 32 cents; in 1869, strawberries 13 cents, raspberries 17 2-5 cents, and blackberries 4 3-10 cents per quart.

The average for the four years: strawberries 11 4-5 cents, raspberries 23 2-10 cents, blackberries 16 4-5 cents per quart. Omit the year 1868 for raspberries and blackberries, when the crop was light and prices very high, and we have for these three years, raspberries 20 3-5 cents, and blackberries, 8 4-5 cents per quart. The average expense for growing a field of Wilson strawberries, per acre, is not far from \$150 to \$200. A good average crop is one hundred bushels per acre. By this average, after deducting all expenses, there will remain about \$113 per acre, net. If we pick only one crop, and as two years are required to grow it, the average is about \$56, net. If the berries sell well, and there is a call for plants, the net proceeds may be five or ten times the above amount. From seventy-five to one hundred bushels is, I think, a large average for raspberries, and the same for blackberries, unless the canes are badly killed; each costing about \$80 per acre for cultivation. According to these estimates, for three or four years past, raspberries average, clear of all expenses, about \$300 per acre, and blackberries have netted about \$125 per acre. I have here given you the average price, per quart, for which our crops have sold during the last few years, but the average net profits per acre I have intended to make rather low, as many of you are perhaps aware, by the figures, hoping not to make the fruit-grower anticipate more than he may realize.

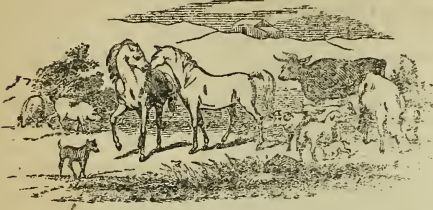
I think it is wrong to convey the idea to those who are just starting in the business, that they may always expect large crops. In 1866, several acres of my blackberries netted me nearly or quite \$400 per acre, but this year will not exceed about one-sixteenth as much, which was caused partly by the large crop of peaches. Therefore the fruit-grower should not be too much elated with a large crop, nor discouraged with a small one, but if he will persevere year after year, he may expect to be well compensated for his labor.—*The Horticulturist*.

TWENTY years ago Pennsylvania was the largest wheat producing State in the Union—now it is about the twelfth on the list.

NIGHT AIR.

During the months of September and October, throughout the United States, wherever there are chills, and fever and ague, intermittents, or the more deadly forms of fever, it is a pernicious, and even dangerous practice, to sleep with the outer doors or windows open; because miasm, marsh emanations, the product of decaying vegetation—all of which are different terms, expressing the same thing—is made so light by heat, that it ascends at once towards the upper portion of atmospheric space, and is not breathed during the heat of the day, but the cool nights of the Fall of the year condense it, make it heavy and it settles on the ground, is breathed into the lungs, incorporated into the blood; and if in its concentrated form, as in certain localities near Rome, it causes sickness and death within a few hours. The plagues which devastated Eastern countries in earlier ages, were caused by the concentrated emanations from marshy localities, or districts of decaying vegetation; and the common observation of the higher class of people was, that those who occupied the upper stories, not even coming down stairs for market supplies, but drew them up by ropes attached to baskets, had entire immunity from disease, for two reasons, the higher the abode, the less compact is the deadly atmosphere, besides, the higher rooms in a house, in summer, are the warmer ones, and the miasm less concentrated. The lower rooms are colder, making the air more dense. So, by keeping all outer doors and windows closed, especially the lower ones, the building is less cool and comfortable, but it excludes the infectious air, while its warmth sends what enters through the crevices immediately to the ceilings of the rooms, where it congregates, and is not breathed; hence is it that men who entered the bar-room and dining-saloons of the National Hotel, remaining but a few brief hours, were attacked with the National Hotel Disease, while ladies who occupied upper rooms, where constant fires were burning, escaped attack, although remaining in the house for weeks at a time. It was for the same reason that Dr. RUSH was accustomed to advise families in the summer-time not being able to leave the city, to cause their younger children especially, to spend their time above stairs. We have spent a lifetime ourselves in the West and extreme South, and know in our own person, and as to those who had firmness to follow our recommendation, that whold families will escape all the forms of Fall fevers who will have bright fires kindled at sunrise and sunset in the family room. But it is too plain a prescription to secure observance in more than one family in ten thousand. After the third frost, and until the Fall of the next year, it is an important means of health for persons to sleep with an outer door or window partly open, having the bed in such a position, as to be protected from a draught of air. We advise that no person should go to work or take exercise in the morning on an empty stomach; but if it is stimulated to action by a cup of coffee, or a crust of bread, or apple, or orange, exercises can be taken, not only with impunity, but to high advantage in all chill and fever localities.—*Halp's Journal of Health*.

Live Stock Register.



COOKING FOOD FOR STOCK.

In the November number of your paper, I notice an article on feeding cattle; which gives an experiment (in England) in feeding cooked feed, and the writer asks for more attention and reports on this subject. As I am a farmer, and one that wishes to see the success of the two and one-half millions of American farmers proceed, and their occupation raised to the true dignity, to which it naturally belongs, for by the "sweat of their brows" the continent is fed, and a surplus left to help feed the world, and give life and business to manufacture and commerce.

Therefore, any experiment that would inform the farmers of America how they could utilize the entire nutritive element of the feed to their stock would be welcome to your readers, and from my observation and experience I am sure that by cooking grain and steaming cut feed from 33 to 40 per cent. more beef, pork or milk can be produced from the same amount of feed.

I will refer to the experience of some farmers from different parts of the country:

Thomas J. Edge, of Chester County, Pa., in an article published in the *Cincinnati Gazette*, stated that 5 bushels of whole corn made 47½ pounds of pork, or nine and eleven-twentieth pounds of pork to the bushel of corn, while five bushels (less mill toll) of corn, well boiled and fed cold, made 3½ pounds of pork, or sixteen and fourteen-twentieth pounds to the bushel of corn, thus he gained seven and three-twentieth pounds of pork by cooking each bushel of corn. B. A. Avery, of Syracuse, N. Y., in his second year's experience in cooking feed for sixty cows, and he is even more enthusiastic than in his first year's experience (which was reported to *Rural New Yorker*) shows that he saved a clean profit of five hundred and thirty-seven and twenty-six one-hundredth dollars on four and one-half months feeding sixty cows, by cooking their feed. Dewey and Stuart, of Orvasco, Michigan, say they fed last winter 64 head of cattle, 7 horses, 340 head of sheep on cooked feed; they cut hay, straw and corn

stalks, and steam them, they say they have saved one-third the expense in wintering this stock; they are all healthy and thriving. They confidently recommend cooking feed. T. C. Eastman, of New Jersey, who has a farm in Dutchess County, and cooks feed, says there is no doubt as to the advantage of cooked feed for cows that are milking and also fattening any kind of stock.

Horses fatten very quickly on it, and are healthy. At a discussion at the State Fair of New York in 1864, G. A. More says: "I was feeding sheep; before steaming, I found by weighing that I was putting on two pounds of flesh per week; after steaming, I put on three pounds of flesh per week; and the stock ate the food clean, and I noticed they lay down quietly after feeding. I also experimented with 64 cows. I had a quantity of musty hay which I cut and steamed; they would eat it entirely up, and seemed better satisfied with it than the sweetest unsteamed hay; steamed hay does not constipate the animal, the hair looks better. I think cutting and steaming combined insures a gain to the feeder of at least 33 per cent. After cows come in, cooked feed increases the milk one-third, and the cows do better when first out to grass." A. B. Conger, ex-President of the N. Y. Agricultural Society said: "By cooking and steaming hay and straw, thirty head of stock may be kept upon the same amount of food as twenty on uncooked food."—Mason, of New Jersey, found that pork fed with raw grain cost twelve and one-half cents per pound, and pork from food cooked but 4½ cents per pound. H. says cooked cornstalks are as soft, and almost as nutritious as green stalks." S. H. Clay, of Kentucky, says: "He fed two hogs upon uncooked corn, and two on cooked corn, then reversed the experiment." In this experiment, "one bushel of corn fed in a raw state makes 5½ pounds of pork, while one bushel of corn cooked produced 17½ pounds of pork."

James Buckingham, of Illinois, says, "from my experiments I find corn fed dry produced five and three-sevenths pounds of pork, the uncooked meal ten and one-seventh pounds, and the cooked meal 22 pounds of pork from one bushel of corn."

Jarvis Harmel, of Richmond, Indiana, says: "I commenced feeding 21 steers on cornmeal; they consumed the meal from six bushels of corn per day (less the toll.) I purchased one of Farquhar & Doan's Feed Boilers, and I found that I could feed but 2½ bushels per day instead of 70 pounds per bushel in the cob of 6 bushels, as before; and the cattle are improving better every way. Now, Brother Farmers, the reason of this great gain is explained by chemists. "Pereira, says to render starchy substances digestible they require to be cook-

ed; to break or crack the grains of the different lamina of which each grain consists."

Raspail says, "starch is not actual nutritive to man or animal unless cooked, the heat of the stomach is not sufficient to burst all the grains of the peculent mass, which is subject to the rapid action of this organ; and a large proportion of food when fed raw passes through the stomach unchanged.—Thus by boiling the various grains, and steaming hay, straw or corn-fodder, all kinds of food are brought within the complete control of the digestive organs and the entire alimentary principles assimilated and applied to the bone, muscle and fat of animals. From the above it will readily be seen why farmers, both in England and America, have obtained such happy results by cooking their feed. These facts, and many others, induced me to buy one of Farquhar & Dean's Feed Boilers in 1863, with which I cooked the corn to fatten two sets of hogs, the large hogs gained one-quarter pound more per day on 40 per cent. less corn than they had on dry corn before in the same pen and bed; the young hogs gained still more, and my milch cows did much better than on dry feed. I am glad to learn that W. L. Boyer & Bro., of Philadelphia, are going to manufacture and supply farmers with these feed boilers and steamers, for I can confidently recommend them to farmers. I must close, hoping to hear from others on the subject.—W. H. BIRDSALL, Wrightstown, Pa., in *American Stock Journal*.

PIG PEN.

The *American Stock Journal* gives the following plan for building a hog pen that can be readily moved about the farm: Take two pieces of six by eight timber each fourteen feet long; dress one end of each in form of a sled runner, then lay them parallel eight feet apart, with the six inch edge on the ground; now take four by four scantling and helve or tenant in crosswise one piece at each end, and one foot from the ends of the runners, leveling the four inch strips one and one-half inches below the level line of the upper side of the runners; next lay a floor of one and one-half inch plank over one-half of the surface, say eight by six feet. Next mortice in four by four scantling at each corner and midways for posts on which to nail boards for enclosing. Let these four posts be flushed with the outside line of the runners: then nail inch boards on the inside, dividing the whole with a cross fence or partition on a line of the floor. Roof over the floored part, and with a slide door shut your hogs in or out of that part and your pen is completed.

Now, you ask where the benefit of this over any common one with posts set in the ground. We answer, you can hitch a team to it and remove to any part of your grounds, placing it from time to time where most convenient to feed, etc., besides enriching various spots of ground and leaving the animals a dry place and fresh ground to work in.

USEFUL RECIPES.

COSTIVENESS IN HOGS.—Give half a pint of lard melted in a pint of new milk. Put the lard and milk in a tin dish, set on the stove and heat until the lard is melted. Administer warm. This will in most cases effect a cure in a short time.

THROAT DISTEMPER IN HORSES.—Take devil's bit, or wild turnip, if green, grate a small one fine; if dry, a heaped spoonful, mix it with wet bran or oats. This repeatedly given, has never been known to fail. It is also a certain cure for a cough.

LAMPAS IN HORSES.—Colts affected with the lampas may have the palate lanced, which relieves the tension of the swollen part. Where there is not much swelling, apply to the palate a solution of alum—a teaspoonful to half a pint of water.

BRUISES OR SORES ON A HORSE.—Boil smart weed in chamber lye: after boiling put in a little soft soap. Wash while warm, two or three times a day. If the weather be cold dry with a hot brick or cover with cloth.

SCRUFF ON THE LEGS OF POULTRY.—The following receipt, has been found an effectual remedy: 20 grains carbonate of soda; 1 ounce of lard, 1 drachm sulphur. Applied occasionally to the legs till a healthy appearance is restored.

SCRATCHES IN HORSES.—The following ointment we have always found a sure cure.—Take 4 oz. ointment of rosin, $\frac{1}{2}$ oz. finely ground verdigris, 2 oz. turpentine, $\frac{1}{2}$ oz. oil of organum, $\frac{1}{2}$ oz. tincture of iodine, 1 $\frac{1}{2}$ lbs. mutton tallow. Mix all well together. Wash the foot clean with castile soap and soft water, and apply the ointment after the foot becomes dry. Once a day will be sufficient to apply the ointment.

FOUNDER IN HORSES.—A large tablespoonful of pulverized alum, and a teaspoonful of pulverized saltpeter mixed. Moisten the dose and administer it by pulling out the tongue and placing the spoon as far back in the mouth as possible. Feed carefully and exercise gently every day. Repeat the dose every other day for several days.

MANGE IN HORSES.—All the mangy parts of the horse's body should be rubbed with an equal mixture of soft soap and ointment, and in twenty-four hours it should be washed off with warm water and the horse carefully dried and blanketed afterwards. If one application is not sufficient, a second one should be made, but eight or ten days should intervene between each application.

When you perceive your horses inclined to rub their manes and tails feed them a little oil meal, say from one to two quarts a day for a week or ten days, and at the same time make a good brine, as warm as you can bear your hand in it, and wash the scaly substance out of the mane and tail, and mix about a tablespoonful of lard to a tablespoonful of powder, and rub it in well about the roots of the mane and tail.

BLOOD SPAVIN AND THOROUGHPIN.—Blood spavin disease is a bursal enlargement, or an increase in the secretion of the joint oil, causing distension of the capsular ligament which surrounds the joint, causing puffy swellings on the front and inside of the joint, rarely causing lameness.

Thoroughpin is the same disease, on a more extensive scale, causing the enlargement to extend through the joint, from one side to another. The only successful treatment which we have found, with few exceptions, is cold water compresses, placed upon the joint in such a manner as to press upon the swollen parts, and retain them there for six or eight weeks, by means of a leather socket made to fit the joint; the compress to be changed every day.—Old muslin cloth is the best material to use.—*American Stock Journal*.

The Dairy.

DAIRY DOINGS.

We extract the following from the transactions of a recent meeting of the American Institute Farmer's Club, held at New York :

E. R. Wattles, of Sydney, N. J., wrote as follows: I have milked thirteen cows the past season. Two of them are two-year-old heifers, and two three years old. The others vary from four to fourteen years old. Commenced making butter the 6th day of April; sold the first package the 15th; made and sold during the season (besides what was consumed by the family of six persons) twenty-six hundred pounds.

Average price per pound, 40 cents	\$1,040 00
Sold also seven calves.....	108 00
Two calves on hand.....	30 00
Fatted three hogs.....	72 00
Total.....	\$1,250 00

Income from each cow..... \$95 15

My cows are grade Ayrshires. Fed each two quarts cob meal per day for three weeks in the spring; fed sowed corn from 20th August until the 15th September, am making now only fourteen pounds per week, as I feed nothing but dry hay.

Mr. Ely—This is just the sort of letters that is desirable to have more of. This kind of statistics are advantageous and must provoke competition and the keeping of accounts. I observe, by the way, that the communications we received of late are of a better character than at any previous period, and I trust that any one who has, during the past season, accomplished anything especially notable will not withhold the facts, but tell what they did and how they did it.

Mr. Curtis—When I was at home recently, I was told that the cows which supplied a neighboring cheese factory last year, yielded an average product of ninety dollars each.

Mr. Crane—I sold milk in 1869 from twelve cows for fourteen hundred and twenty-one dollars, reserving enough all the while for my family, which consist of from twelve to twenty persons. I live near Elizabeth, New Jersey, and furnish a milkman who helps to supply that town.

Mr. Lyman—While this subject is up I would like to show some butter of the celebrated Philadelphia manufacture. It costs ninety cents per pound, and the man who makes it gives the following account of his process. He says: "I have no difficulty in making good butter all winter. I keep my pantry at fifty-eight degrees as near as possible, and do not allow the mercury to vary much either way from that figure. As spring cows approach the following winter, that is, when their calves are

seven or eight months old, the butter comes much harder. For that reason I always like to have fall cows, so as to mix their milk. The food of cows makes a great difference with the flavor of the butter. I find clover-hay, cut and moistened, sprinkled with meal and wheat shorts, is the best food for making choice butter. It is also important that no weeds be mixed with the hay. Clover I find superior to timothy or any other grass. I do not feed cabbages or turnips on account of the flavor. Cows differ greatly in their qualities as butter-makers, and in selecting I find it best to reject many animals that would be valuable in a milk or cheese dairy."

ALSIKE CLOVER.—In April, 1867, I sowed 1 lb. of Alsike clover seed; it came up well but showed very few blossoms that year; next year it blossomed well, having two or three blossoms on a stalk, of very pleasant odor, reminding me of Orris root. When the first blossoms turned brown I mowed it and soon after turned the cattle into that field. They appeared to like feeding in that part where the Alsike grew particularly, and it may be they injured it by too close feeding. This year the Alsike had hardly a blossom to be seen, and the ground was occupied by red and white clover, timothy and other grasses. It is said that in Sweden the Alsike grows to the height of four or five feet, and in England to two feet, and that when once established it will remain many years in full vigor. With me it did not grow near as large as the red clover; but if it was larger and would last many years without reseeding, I should think it a desirable plant to grow for cattle. A friend here who procured seed at another place the same year that I sowed mine, has none of the Alsike now. H. B. O. *Whitinsville Mass., Jan. 29.*
—Country Gentleman.

FEEDING TOO MUCH CORN.—A correspondent of an eastern paper, referring to the fact that pork is sometimes found of a yellow color; says that it results from the too free use of corn for food. He says that about the time hogs are finished off farmers often make a mistake in feeding too much unmixed grain. The result is bad digestion and yellow fat. Mixed feed should be given to the last—roots, pumpkins, apples, with corn. As a rule, you can get them to eat more grain and take on more flesh than by a diet of rich food only.

GYPSON FOR MANURE.—The evaporation and escape of gases from manure heaps, stables, &c., can be prevented by frequent sprinkling of gypsum, which absorbs these subtle elements, and precipitates them into a fixed salts of ammonia, (barthorn,) for the use of the crops to which it may afterwards be applied.

*From the New York Evening Mail.***THE VINE IN EUROPE.****Recent Observations by an American Vine-Grower.****Practical Details for Practical Men.**

BY CLARKE BELL.

FRANCE—(CONTINUED.)

It would fill a volume to describe in detail the many varieties of grapes and wines that are produced in this most favored land of the vine, and in speaking of Southern France within the scope of these articles, we can but allude to those of more general renown. It would not be proper to leave this part of France without allusion to the wines of the Rhone, many of which are pronounced at this day by excellent judges to be in the very front rank of French wines.

The vineyards of Valence are doubtless the most important for the excellence of their wines. The major part of the wines of this district go at first into the hands of the Bordeaux wine merchants.

The most celebrated wine grown in Valence is probably that known as

Hermitage.

A hill rising up from the Rhone, near the town of Tain, is the spot where, with a southern aspect, the vineyards are planted that produce this justly celebrated wine. It is one of a chain of granite hills, crossed by strata of gravel and veins of sand. Some parts of the granite seems decomposed. The vineyards are on the slopes. The vines of the old Abbey are pointed out on the summit of the hill called Bessas.

The monks seemed to have been the depositaries of the learning and the literature of the world during the dark ages, and we are indebted to them also for the character, culture, and improvements of vineyards and wines in those days, when without the aid and influence of these men, these also would have been lost.

Traditions say that a hermit here manured the vine with the pulverized granite, and with such results that his example was followed until the whole sterile hill-side was changed into magnificent vineyards.

The Red Hermitage commands large prices, and is a vine of acknowledged merit, but it will not keep to old age.

The White Hermitage is made exclusively from white grapes, and by many is considered the finest white wine that is produced in France.

It, when in perfection, should be slightly straw-colored. It commands a great price. It keeps much better than the red. The aroma is peculiar to itself, and no wine in the world resembles it in this respect.

It is very rich in taste, too much so to be classed as a dry wine, but not enough to be called luscious. It is rather between the two. The amount produced is so small that the genuine is rarely seen out of France. The French people appreciate their best wines, in my judgment, better by far than any and all other people, and they consume them at home as a rule. They are quite willing to pay for superior

wines, for their own use, prices that would render their exportation an absurdity. Except champagnes they send away their poor wines and keep and drink their best. The very worst are sent to this country. That this may change in the future is to be hoped; that it is so now is beyond all question.

The red Hermitage is the fruit of the union of two varieties of grapes; they are called the great and little Seyras; while the white Hermitage is produced from the greater and lesser Rousaune.

An exceedingly rare variety called "Ermit age-paille," or straw Hermitage, is made in small quantities in very favorable seasons, by selecting from the white grapes the best and most perfect, then laying them to dry on clean straw for six weeks to two months, and then pressing them. It commands an enormous price, and must have a peculiarly favorable season after the vintage and while the grapes are drying, which only rarely occurs, so that it is by no means easy to obtain or produce this wine in perfection.

There are very many wines of this part of France which rank below Hermitage, none above it. It is not unsafe to say that more than one hundred brands of wine are produced in this department, all of different character, and of more or less merit, and it is not advisable to attempt to allude to them in detail here.

The vines grown on the hill sides in a district will have certain characteristics and qualities, differing from those of the plain or level lands, and along the banks of rivers, each district and place producing its peculiar wine, all good, and some of wonderful merit. The traveller who drinks in France the "Vin du Pays" will always have good wine, or reasonably so.

Coming northward, the next important portion of France, and one which has as much perhaps as any other contributed to the fame of French wines, is

Burgundy.

This district embraces the Departments of Cote d'Or, the Yonne and of the Saone and Loire. This wine district is about one hundred and twenty-five miles long, by upwards of sixty miles in width, and mainly lies under the forty-fifth and forty-sixth degrees of latitude.

The most renowned portion is that called Cote d'Or. It consists of a chain of small calcareous hills from Dijon to the department of Saone.

The surface and slopes of these hills are covered with vineyards. On one side of the hills the exposure is southern and southeastern, and the other has an eastern aspect. The soil is red and gravelly, and the plains at their foot have a deep and rich red soil.

The department of Saone and Loire are the least important, as they do not rival the Cote d'Or in either quality or quantity.

Burgundy, in those finer and delicate qualities which connoisseurs would regard as most essential to perfection, is perhaps the most perfect of all known wines.

The bouquet is most exquisite of the higher grades; it has a delicious flavor, and is very delicate. Unlike most of French wines it cannot be mixed without serious injury both to quality and bouquet.

Take Chambertin when it is good and prime, and it is difficult to find its superior in all the world. It can only be rivaled by the wine of Beaune, which is in this district, or by some of the famous brands

of Burgundy, grown on small vineyards, such as the Clos Vougeot or the Romanee Conti.

Wines of these brands are sold in New York, but in my judgment very little of the pure and genuine article is in this country except in private hands and owned by gentlemen who have purchased and imported themselves.

A fine wine known as the Volnay is grown near Mersault. It is light and very delicate, and I have tasted at the Union League Club, in this city, a fine sample of this brand, from the private stock of a friend who imported it himself many years ago. It has a slight favor of raspberry.

It is impossible to enumerate the varieties of the wines of Burgundy. Their number and names are legion. They are very deep red in color, sometimes almost black, very pleasant and palatable to the taste, but of tremendous body, and have a way of their own of making themselves felt at the toes. They should not be kept long. They are in their prime early, and, if genuine, are far too good to keep and should perish in their youth.

They are affected injuriously by transportation. The shortest sea voyage affect them, even across the English Channel, and while they often regain their flavor they sometimes lose it forever.

To be tasted in their highest excellence one must drink Burgundies where they are made, and in the cellars of those who have studied them and appreciate them.

I shall briefly allude to the manufacture and culture of the wine in this district.

The Manufacture of Wines in Burgundy.

The vintage usually takes place in early October and before the middle of the month. The picking is done by men and women and children. Large tubs are scattered through the vineyards which are filled from the small baskets of the pickers.

These tubs when full are carried on the backs of men to the large crushing vat, where they are trodden under the naked feet of men. The crushed mass is then drawn to the large fermenting vat, which is often very large, and they are left on the husks in this large vat or tank for three or four days. To aid the fermentation men then strip themselves entirely naked and get into this vat, and stir up the liquor up to their necks in the wine, from three to seven or eight men, depending on the size of the tank. This is repeated at intervals until the fermentation becomes active.

This absurd habit is practiced in all the best vineyards, and it is claimed that the warmth of the bodies of the men stimulate the fermentation.

If you demand whether, if the wine be heated by steam or direct heat, it will not answer the same purpose, it is usually conceded, still all the first-class vineyards continue this filthy and disgusting habit, under the impression that it actually improves the wine, and many believing that without it good wine cannot be obtained.

After a long fermentation on the husks, in these large tanks; the wine is drawn into small barrels that are tiered up in the cellar, where it remains. In filling these casks care is taken to put an average amount in each of the clear wine and the sediment or substratum of the tank, so as to have the yield uniform, and not all the clear wine from the vat in certain casks and all the sediment in others. These are as far as possible equally distributed.

The barrels are usually left not quite filled for a few weeks, others filled and bunged securely.

The wines are drawn off in the succeeding March, in some cellars racked two or three times the first year, filling them with eggs.

No pains are taken here to keep the stems out, as in Bordeaux, and some regard the astringency of the stems as beneficial to the wine. As a rule the grapes are not stemmed in the Burgundy district.

It is difficult to find in the world a wine superior to choice Burgundy.

There is relatively a small quantity of the better brands produced, and they are appreciated higher in France than elsewhere, and command a price as high at home as could be obtained abroad. The French wine merchants have the first chance at it, and they are the best judges of its merits, and keep the best of it themselves.

The genuine Chamberlain is a scarce wine with the foreigner, and the inferior grades only are exported, yet they are very good indeed, but only the educated and experienced taste can distinguish the difference in the higher brands and grades.

The Culture.

The vines generally are originally set in rows, about five feet apart, and about two plants to a yard in the row, and then propagated from layers, which, as the vineyard grows older, increases the number of plants and makes the rows irregular, and reduces the distance between them. Trellises are rarely used, and the knife is plied vigorously, and vines grow low, frequently cut back to two eyes.

The cultivation is very generally done by hand, as the irregularity in the vineyard caused by layering makes this kind of work necessary; the number of plants to an acre of an old vineyard will run sometimes as high as 5,000 to 10,000.

Generous manuring is used on the new vineyards, ostensibly for the layers, not of the coarse kinds in vogue in Germany, but concentrated guano, oil cake, and bone dust; but on the best vineyards, and those whose wine commands a fine price, they never use manure except a vine seems dying without it, as it deteriorates from the quality of the wine. The French idea is that the nearer the fruit is grown to the parent stem and to the ground, the better its quality for wine, and this idea controls the Burgundy vine-dresser in both Fall and Summer pruning. In vineyards of known and established reputations the effort is not to get many grapes from a vine, but to get few and superior ones, and this theory continued and persisted in for many years no doubt contributes to the excellence which the wines of Burgundy have deservedly attained.

(TO BE CONTINUED IN OUR NEXT.)

PROFIT OF FATTENING HOGS.—In Kentucky the practice largely prevails of persons not directly engaged in farming, buying store hogs and corn, with the design of making pork for the market. This year those who have gone into business have realized very large profits. The Shelby (Ky.) Sentinel says one man bought 210 hogs and corn to feed the same, for \$3,263, fed and sold them, averaging 323 lbs., for the handsome sum of \$6,640, and refused the offer of \$954 for 111 shoats that he raised from them. Another man and his sons fed and sold 792 hogs averaging 305 lbs. upon which they made an outlay of about \$9,000 for the round sum of \$24,000.

ALSIKE CLOVER.

J. H. Townley, of Parma, Jackson County, Michigan, who is an extensive raiser and dealer in Alsike clover seed, in his price list lately issued, gives the following information concerning this clover :

The plant originated in Sweden, and was first discovered in the town of Alsike, from which it derives its name. Since its introduction into the United States, ten years ago, its cultivation has been quite limited, owing in part to the apparent extravagant price asked for the seed. The extravagance in price, however, is more apparent than real. The seed is small. For seeding, four pounds of it will equal twelve pounds—the usual quantity advised to sow per acre of the common red clover ; or, in other words, \$8 per bushel for red clover seed would be equal to \$24 for Alsike seed. It might do well sown in the fall, but never having tried it, I will not advise it. It will do well sown on winter wheat, rye, spring wheat and oats. If sown with winter grain, it should be sown as early in the spring as the weather will permit, and harrowed lightly after sowing. With spring grain, sow as soon as the harrowing is completed, and follow with a roller. On a rich soil the stalk has a tendency to grow too long and lodge, and it should be sown with timothy. Three pounds of Alsike seed, with one-half of the quantity of timothy seed, will seed an acre thick. When sown alone sow four pounds per acre. It generally makes but little show the first year ; the past season has been an exception. From last spring's sowing it commenced blossoming soon after the wheat was cut, and continued in bloom until October. The blossoms are small, very profuse, exceedingly numerous, and bees, both native and Italian, work on them as readily as on white clover.

The Alsike clover seeds the first crop ; and, when cut for seed, the second growth is short but thick, and makes excellent late fall pasture, especially for cows. The past season, on the 9th of June, I cut a small patch for experiment. It stood about two feet high, very thick, and was full of blossoms. A second crop grew as heavy as the first, full of blossoms but no seed. The first of July another small piece was cut, with the same result, showing that in a wet season two crops of hay could have been secured from the same field. My seed crop was fit to cut by the twenty-fifth of July, but owing to bad weather, it was not cut until in August. For pasture the plant is preferred to red clover by stock of all kinds. It makes hay, too, of an excellent quality, free from the "fuzz" and dust found on red clover. This clover luxuriates in a moist, rich soil, and will do well on any soil where red clover will, and on some soils where red clover will not grow,

such as on low, wet land, if not springy, along the outside of marshes, and even on marshes, if the wild grass is subdued, and it is not too wet. A field once seeded to Alsike will not require sowing again in several years, as it will not winter-kill like red clover.

Buyers of seed should purchase only of reliable parties who have raised their own seed, or are competent judges, and know that they are selling a genuine article, as much of the seed sold for Alsike clover is more or less mixed with white clover, timothy, sorrel and other seeds ; and whoever buys it in Canada must expect to pay, in addition to the seller's price and the express charges, a duty of thirty per cent., in gold, to the United States Government, often making it cost him more than it would to buy in the States.

Price of Seed.—10 pounds or less, 75 cents per pound ; from 10 to 20 pounds, 70 cents ; from 20 to 30 pounds, 65 cents ; from 30 to 45 pounds, 60 cents ; for 60 pounds (one bushel,) wholesale price, \$35.

CHOOSING A FAMILY HORSE.—A writer in a leading London journal, says the *Germantown Telegraph*, referring to the signs for choosing a family horse, says, what we all know, that fast trotters are not generally fast walkers ; that it is difficult to find a good driving-horse which is at the same time a good saddle-horse ; that a galloping horse is nearly always a fast walker. He proceeds as follows :

Some persons consider color an indication of temper, and distrust a bright chestnut. We believe that the rule is sound, but the exceptions are numerous. The eyes and ears of a horse when it is first led out, when its mouth is handled, when a whip is shaken near it, and when it is backed are much better criteria of anger no less than of fear, and are easily recognized. Irish horses, excellent as fencers, are apt to be of difficult temper. A horse sometimes overhangs its fore legs, so to speak.—This is a dangerous fault, as the centre of gravity, being too far forward, the beast is likely to stumble. A horse with its belly 'tucked in,' as it is called, that is to say, going up backwards, as in a griffin—a fault more common in carriage horses than in hacks—feeds and fattens badly, and will wear out rather sooner than another."

A correspondent of the *Western Farmer* says :—
"I saw in your paper that a correspondent wanted to know what to do with a horse whose legs would swell. Tell him to feed the horse plenty of roots—mean carrots, potatoes, turnips or anything that has a relaxing tendency. Flaxseed boiled, is good. Feed bran also, and keep him well groomed for grain."

THE MARYLAND FARMER

AT \$1.50 PER ANNUM,

PUBLISHED ON THE 1ST OF EACH MONTH,

BY

S. SANDS MILLS & CO.

No. 24 South Calvert Street.

CORNER OF MERCER,

BALTIMORE.

S. SANDS MILLS, } PUBLISHERS AND PROPRIETORS.
E. WHITMAN, }

BALTIMORE, MARCH 1, 1870.

TERMS OF SUBSCRIPTION:

\$1.50 per annum, in advance—6 copies for \$7.50—10 copies
\$12.00.

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REMOVAL.

E. WHITMAN & SONS have removed to No. 145 West Pratt Street, formerly the Baltimore and Ohio Railroad Depot, opposite the Maltby House, where they will have increased facilities and conveniences for extending their manufacturing business, and keeping on hand a larger and more complete stock of agricultural implements and machinery than heretofore. With the advantages of the location, and the introduction of greatly improved machinery in the manufacturing department, they will be enabled to supply every variety of improved labor-saving machinery at the shortest notice and at the lowest market rates.

WASHINGTON COUNTY AGRICULTURAL SOCIETY.—At the annual meeting, held last of January, the following gentlemen were elected for the ensuing year:

President, Capt. Geo. F. Heyser; Treasurer, Benj Firey; Secretary, P. A. Witmer; Managers, John Middlekauff, John H. Cook, Martin Startzman, David Brumbaugh, Daniel Startzman.

Hon. John Merryman's Response.

The newly elected State Treasurer of Maryland, on the occasion of an official notification of his election, made the following response:

"I bring to the duties of the office no feelings of the partisan, and no purpose of hostility to any interest of this State. I consider it the duty of the Board of Public Works to foster and promote, by all legitimate means, the internal improvements of the State, and to that end my best efforts, as a member of that Board, will be freely given. Against the influence of any railroad, beyond its legitimate and proper business as public carriers, I shall at all times exert whatever power and influence I may possess. I shall be equally ready and prompt to advance, to the best of my ability, the material interests of all our internal improvements. The partisan of none, I am the friend of all."

The new Treasurer entered upon the duties of his office on Tuesday, February 8th. The retiring Treasurer, Hon. Robert Fowler, who has filled the position with so much ability for the past eight years, was present, and tendered his services in initiating the new incumbent in the routine of the office duties. It was really pleasant to see the cordiality existing between these two distinguished gentlemen who had been rivals for this prominent State position, and is an example we commend to all in public place. The new Treasurer has our good wishes for the successful discharge of his important trust—and Mr. Fowler's retirement will be followed by the prayers of a host of warm personal friends, for his future happiness, and thanks for the faithful performance of an important trust, as he will receive on all hands, "well done good and faithful servant."

REMOVAL.

The office of the MARYLAND FARMER has been removed to No. 145 West Pratt Street, opposite the Maltby House, in the *New Agricultural Buildings* of E. WHITMAN & SONS, where we will be pleased to see our friends at all times. The new office is centrally located, being convenient to the steamers and railroads.

FREDERICK COUNTY AGRICULTURAL SOCIETY.—At the annual meeting of this Society held in January last, the following gentlemen were elected officers for 1870:

President, John Loates; Vice-President, Dr. Fairfax Schley; Secretary, H. C. Koehler; Treasurer, Calvin Page; Cor. Secretary, Charles H. Keefer.

The Vice-Presidents for last year were re-elected, except Thos. G. Maynard, vice Francis S. Jones, deceased, and B. J. Snauffer, vice J. B. Snauffer, removed.

RURAL NEW YORKER.

D. D. T. MOORE'S RECEPTION.

A DOUBLE ANNIVERSARY.

We were honored with, and cordially accepted, an invitation to be present on Wednesday Evening, February 2d, at the residence of D. D. T. Moore, Esq., No. 1 East 41st Street, corner of 5th Avenue, New York, to celebrate his "*Fiftieth Birthday, and the Twentieth Anniversary of the Rural New Yorker.*" We made our arrangements accordingly, and taking the express train, accompanied by our old friend W. L. BUCKINGHAM, Esq., of Bickford & Huffman celebrated "Grain Drill" fame, reached New York in time to make our bow to the Napoleon of the press, surrounded by a host of friends, many of them celebrities in the agricultural and horticultural world. Our reception was hearty, and our gratification at all we saw, and met, and heard, amply repaid us for our journey. We were gratified to witness the triumph of a man who has so richly deserved and earned success by the display of an indomitable industry. Few men have achieved so much as a journalist as Col. Moore. He started with a determination to succeed, and to deserve success by the high moral tone of his paper. His earnest efforts found their full justification and endorsement in the people's verdict. We may search through the twenty volumes of the *RURAL* without finding a sentence that would cause a blush to hear repeated, or hearing from any one a regret that it had ever been printed. In the earlier days of the paper much of its unquestionable excellence in this respect was due—we will be pardoned for saying—to the fine cultivated taste and high moral tone of Mrs. MOORE. In all the long years that have since elapsed, says an old family friend, she has been indeed a most rare and valued "helper," he never "having known a pair where separate individuality was so completely blended into a harmonious whole of married life," and we congratulate her that she still lives with health to enjoy her husband's triumph.

Twenty years ago he sold out the *Genessee Farmer*, a monthly publication which he had taken with a very limited circulation, and in some two years increased its circulation many thousands. Although he had been so successful, still his friends in Rochester thought it little better than mad folly, when he announced a *weekly* paper, which started with an edition, as we learn, of some 3,000. So well, however, had he matured the enterprise in his own mind, that we think in matter, arrangement and general interest the first impression was little inferior to its last successor. The *RURAL* now exceeds

that number by many thousands, and has probably a larger circulation than any paper of its character in this or any other country, and this to us is not surprising, as it is managed and edited with such great and marked ability.

Having enjoyed ourselves too well to take notes on the occasion, we hope to be pardoned for introducing here a very full and accurate account of the "*Fiftieth Birthday*" night of our friend, the Col., with the promise that when we celebrate our birthday, with the same surroundings, that he may publish a full panorama of the whole affair. We copy from the New York *Globe*:

"A very enjoyable and interesting social event took place Wednesday evening at the residence of Hon. D. D. T. Moore, ex-Mayor of Rochester, and the well-known proprietor of *Moore's Rural New-Yorker*, at the corner of Fifth avenue and Forty-first street. The occasion was the anniversary of Mr. Moore's fiftieth birthday, as well as the twentieth anniversary of the *Rural New-Yorker*. Some two weeks ago a large number of cards were issued to his gentlemen friends, and last evening his elegant mansion was thronged with hundreds of our foremost citizens, as well as a large delegation from Rochester and other towns, all of whom hastened to congratulate the host upon his youthful appearance at the age of half a century, as well as upon the wonderful success which has attended the publication of his agricultural paper, until it is to-day the foremost weekly of the kind in America. It is now about a year since Mr. Moore removed the publication office of the *Rural* from Rochester to this city, finding a home for it in the famous Park row, of Printing House Square. Mr. Moore left Rochester amidst the universal regret of its citizens, but the loss of that city is a gain for ours, since he has purchased a residence on our most fashionable avenue, has brought his large business to our thriving town, and intends to reside in our midst with his family. We need not enlarge upon the merits of the *Rural*, for we have occasion to commend it weekly to our readers.

By 10 o'clock in the evening the Moore mansion was thronged with gentlemen, in full dress, each anxious to take their host by the hand and bid him "God-speed" on life's journey. The house was profusely decorated with flowers from top to bottom, the floral display being one of the finest in this city this season. A band of music was stationed under the grand staircase, screened from the guests by a hedge of japonicas, azalias, meadow pinks, etc. The stair-case was lined with flowers, and the niches in the walls were filled with baskets and pyramids of them. On the second floor, three large parlors were thrown into one room, each of which was profusely decorated with flowers. Immense globes of red and white camellias, violets, callas, China roses, etc., hung suspended from the arches over the doors and in each of the balcony windows. In the front room, where Mr. Moore received his guests, there was a large globe of white flowers, with the word "Welcome" picked out in red. Over the bay window a large design in white flowers displayed the legend "1820—MOORE—1870" picked out in red and blue flowers. The window-cases were covered with green moss, stuck full of beautiful flowers of all colors. The mantle was ornamented with a gothic design in flowers, and supported two immense vases filled with them. In the opposite corner of the room from the "globe of welcome," there was a beautiful floral design, some six feet high, representing a harp,

which rested on a column covered with ferns. The *tout ensemble* was magnificent and charming.

In the centie parlor, into which the staircase opened, there was a large shield of white flowers placed over the balcony window, displaying the letter "M" in red flowers. Beneath this, and suspended from the arch, there was a coat of arms in flowers, quartered in blue, red, and white. Over the arch of the window a wide band of flowers displayed the words, "1850—ROCHESTER—MOORE'S RURAL NEW YORKER—NEW YORK—1870." On a large table beneath the arch there was a perfect model of a printing press, wreathed with flowers. On each side of it there was a "full sized "form," or page, of the *Rural New-Yorker*, composed wholly of flowers. The column rules were picked out in red flowers, and at the head of the page we read, in the same colored flowers, "*Moore's Rural New-Yorker*."—In the third parlor there were beautiful bouquets and baskets of flowers, and a large basket of everlasting flowers of all colors.

At the left of the great hall was the wine and lunch room. A large table in the centre of the room supported a beautiful design, composed of apples, pears, oranges and grapes. They were artistically arranged in gilt wire frames, making a cone of fruit nearly as high as a man's head. The table, also, contained numerous dishes of fruit, while side tables were loaded with cakes and *bons bons* in baskets, punch and lemonade bowls, etc. There was a plenty of champagne and wine for those who wished it.—The third floor was devoted to dressing-rooms, and the fourth floor contained the smoking and conversation rooms. A large basket, full of letters and telegrams from distinguished persons who could not be present, or who sent congratulations, was placed in the reception-room.

About midnight the dining-room was thrown open, displaying a table loaded with everything a dainty palate could desire. The tables were elaborately ornamented with pyramids of flowers. Colored servants in swallow tails and white gloves were everywhere present. After the supper a few toasts were drunk to the health of Mr. and Mrs. Moore, when, in reply to one of them, Mr. Moore made a very neat speech, which caused much merriment. He did not hope for another fiftieth anniversary of his birth-day, and trusted that in the world toward which he was travelling he would not be obliged to follow the same occupation which he does here.

During the evening, Mr. Moore was presented with a costly gold-headed cane, and a large frame containing the photographs of his corps of editors and assistants on the *Rural New-Yorker*. The party broke up at an early hour in the morning."

THE MARYLAND FARMER.—A correspondent writing from Virginia, compliments the *Maryland Farmer* as follows :

"If I could, I would put a copy of the *FARMER* in the hands of every farmer in the country as a work that cannot be too highly praised, and at the same time, is worth double the amount of the subscription."

A correspondent of the *Massachusetts Plowman* calls attention to an old method of cleaning pork barrels. He puts in the empty barrel an armful of straw, hay or shavings, sets it on fire and lets it burn out undisturbed. He then finds the barrel pure and sweet. There is no better way.

COMPOSTS---ANSWER TO A NORTH CAROLINA CORRESPONDENT.

A correspondent writes us from Smithfield, John-son's county, North Carolina, stating that he proposes to make his compost heaps in the following manner, viz : "A layer of pond muck and a layer of ashes—say from thirty to fifty bushels to the acre;" and he asks, "how much fertilizer would you use on an acre with the above compost?"

We answer—one hundred and fifty pounds of ammoniated phosphate—that is to say—any good soluble phosphate which has been mixed with a certain per centage of ammonia.

This is our preference ; but if clear Peruvian guano is used, then seventy-five pounds will be found sufficient.

He has a theory that the admixture of guano, and also indeed of any salts of ammonia with ashes will drive the strength out of the guano. Our reply is that the muck, if dry, will absorb and retain the ammonia. If lime, instead of ashes, were used, serious injury would undoubtedly ensue, but we apprehend no danger of loss from muck if *it be dry*. But in any event a small admixture of freshly burned charcoal will prevent any possible loss from the volatility of the ammonia.

The Dickson preparation to which our correspondent refers, if properly made, already contains sufficient potash, and therefore does not require an additional supply in the shape of ashes. If however, our correspondent has ashes to spare, and his soil is deficient in potash, he cannot put his ashes to better use than in the compost he proposes.

In respect to the use of cotton seed for compost, we think very highly of it, for we know of cases where land manured with twenty bushels of cotton seed, 50 pounds of Peruvian guano, produced in 1859, in Hancock County, Georgia, 1,806 pounds of seed cotton to the acre, whilst an acre of the same land, not manured, produced the same season only 508 pounds.

DARWIN AND AGASSIZ, and still more their respective disciples, represent two opposite doctrines in regard to the origin of animal species. The first sustains the idea that a gradual development from inferior to superior species took place, so that in the beginning only inferior species of animals existed, which, by change of circumstances, gradually developed into others, among which were some of inferior, others of a superior type; while the original races, of which the fossil remains prove the existence, disappeared. The doctrine of Agassiz is that every species had its separate progenitors, especially created to propagate their own species unchanged ; that even the human race had at least five progenitors—one pair for the negroes, one pair for the whites, &c.

NOTES AND COMMENTARIES.

BY PATUXENT PLANTER.

As our Legislature presents, for the second time, the remarkable and almost unprecedented spectacle of a political unit, all the members, without a single exception, of both Branches, being of the same political party, and each one elected by an immense popular majority, it may be viewed with hopeful confidence by the agricultural class, for redress of some of their wrongs, and looked to with a corresponding trust that wholesome laws will be passed for their benefit. It is also a matter of proud satisfaction to all classes that the present Assembly is composed of discreet, prudent, liberal and highly gifted men. Beside the matters of vast importance to all the interests of the whole people of the State, such as fostering works of Internal improvement—securing a large revenue to the State by regulating, under a proper system, the taking of oysters from our Bay—the grand water mine of wealth to our State and its people—the stocking of all our rivers and creeks with valuable fishes, once the source of individual wealth, or at least competence to thousands, and the cheap source of comfort, luxury and sustenance to all our citizens—and other great enterprises, there are many minor subjects worthy of legislation. Minor because affecting a smaller number, but to that number of vast and vital importance. Among these are: Protection of the farmer against frauds in the *manufacture of fertilizers; the mode of selling farmers products, and the various taxes and charges to which they are subjected; mixing grain in boats; country roads; fencing; and many other things of deep interest to the rural population, one of the chief of which is the necessity of a dog tax.* Notwithstanding the fact that it has been shown by reliable statistics, that 100,000 dollars are lost to our farmers by worthless dogs each year, and that a dog-tax would bring in a revenue of at least \$50,000, besides breaking up the keeping of worthless curs by a class of people who would raise a hog instead of a dog, and thereby add to their material interest and support, and to that extent save other people's from being feloniously taken to supply the deficit in hog-meat, our Legislators have not heretofore had the manliness to pass a dog-tax. I hope it will be passed by the present Assembly, and if not, it is to be hoped, the State Agricultural Association will in the future demand it through the united action of its influential members who represent almost every precinct in the State. Every State which has tried it has been satisfied with the results, and great amounts have been saved to the people by a strict enforcement of the law. England

protects her sheep—a very important branch of her industry—and obtains a revenue yearly of near half a million of dollars by her dog-tax. I have yet to meet the man who pays any other tax, oppose a dog-tax, and yet the politicians are afraid to pass such a law.

The Agricultural, Mechanical, &c., Bureau

is one of the wisest, most practical and useful suggestions or recommendations of the able message of Governor Bowie. The organization of such a department would be of incalculable benefit to the prosperity of the State, and would confer lasting honor on those who promoted the measure. Pages could be filled with suggestions, historic facts, and statistical proofs, argumentative of the beneficial influences of such a Bureau, zealously and properly conducted.

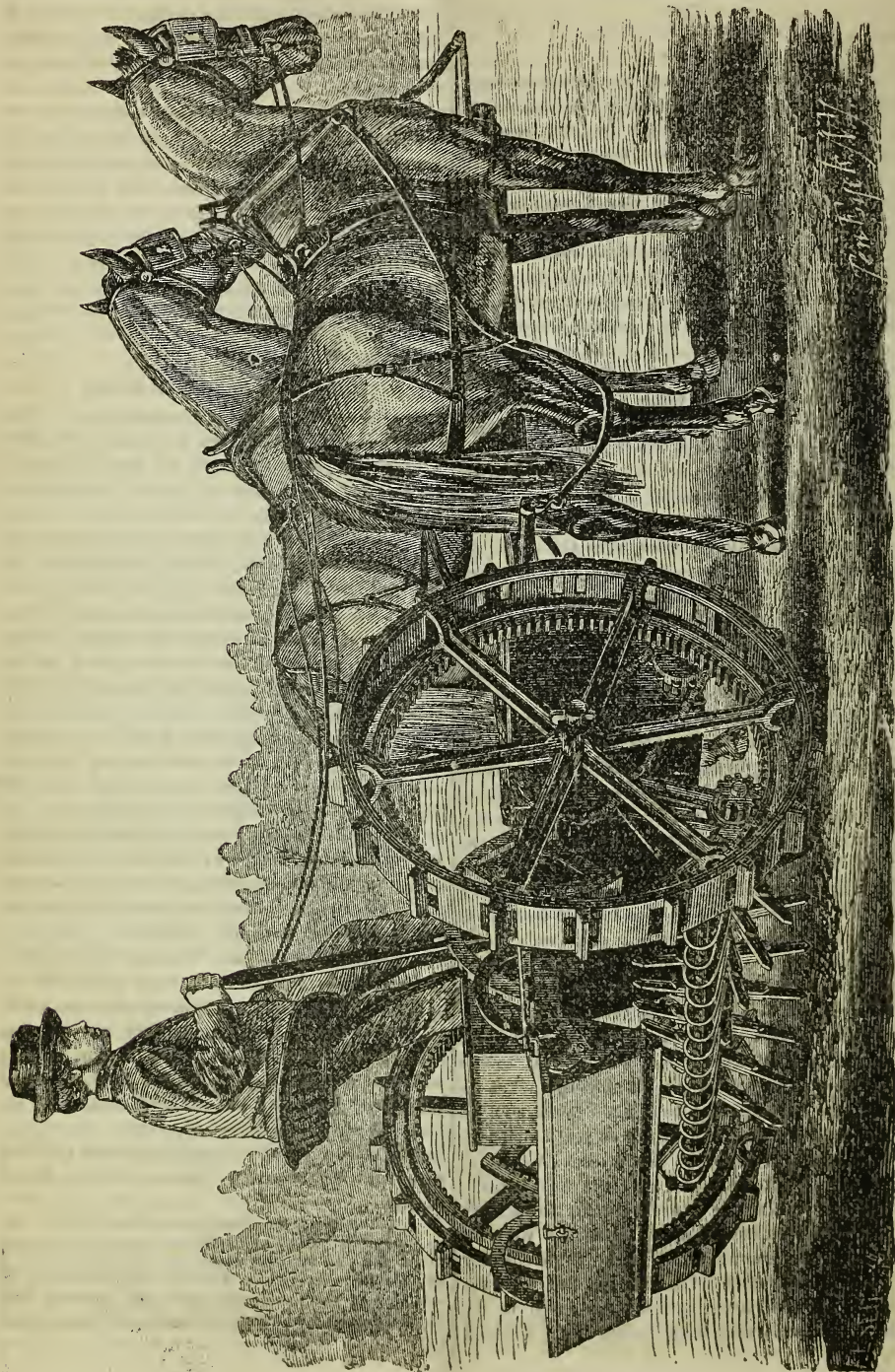
Fruit Trees and Small Fruits.

In view of the number of railroads on the Eastern Shore and in Southern Maryland in process of construction, some of which are near completion, it behooves every owner of land to set about this spring planting orchards of Apples, Peaches, Pears, Quinces, &c., and preparing plantations of small fruits, so as to be ready to avail themselves of the facilities offered by those roads for transportation to market. The demand for good fruit in good order is always, and will ever so continue, beyond the supply, whilst the overplus, or inferior, can advantageously be converted into wine or brandy or cider, and the small fruits canned for sale in winter.

The canning and distilling could be most profitably done by a few neighbors joining in a stock company for that purpose. Every man within five miles of a railroad station is near enough to market to make fruit growing a part of his farming system. In every neighborhood we'll stocked with fruit trees, a distillery would pay well. Every neighborhood could support a canning establishment with tomatoes, green corn, peas and small fruits. Each such establishment would be a home market for small as well as large quantities, and an increase of population, brought from abroad, which would be induced to be industrious and thrifty, because these establishments would give employment to not only men, but women, boys and little girls. Villages would spring up and our old fields blossom as the rose. Since slavery is gone, the glory of the "weed" has departed; we must change our system and keep pace with the changing times and the progress of the age.

A CORRESPONDENT of the Rural American adduces many facts in support of the theory that rust is a disease as permanently fixed in some varieties of wheat, as the consumption is in some families. He classes the Tappahannock with the diseased varieties.

Taveau's Revolving Sulky Harrow and Broadcast Seeder.



Improvement in Sully Harrows.

Almost daily our practice as patent solicitors confirms the view often expressed in these columns, that agriculture as an art is undergoing a mechanical revolution. The universal adoption of power machines for cultivating the soil is all that remains to render the revolution complete. The first step in this direction is the attempt which has for some time been in progress to substitute improved machines driven by horse power, for the operations of seeding, harrowing, and cultivating, which in the regular routine succeed the operation of plowing. The machine plow driven either by steam or horse power—most probably the former—will follow in due time.

The machine illustrated herewith is a Maryland invention, and it received a first class premium (a gold medal at the late State Fair, Maryland.)

It performs the operation of what is known as "broadcast" seeding and harrowing simultaneously, and as the inventor assures us, at the rate of from ten to fifteen acres per day; at the same time it distributes uniformly any fertilizers of a pulverulent character. It may be taken upon newly plowed land without any previous preparation of rolling, harrowing, etc., and is said to perform its work under such circumstances in a very satisfactory manner.

The depth of the harrowing is controlled by the driver, and can be instantaneously adjusted to any required depth. The seeding is controlled by easily adjustable gages, requiring only a few seconds of time for their adjustment, without the employment of a wrench or hammer. We are informed that long and thorough trial of this machine has fully demonstrated the justness of the claims made for it, and its general applicability to all soils adapted to the production of cereals.

The revolving harrow is driven by pinions actuated by the inside teeth of the driving wheels, and is propelled with considerable velocity, its teeth penetrating and comminuting the soil, incorporating the fertilizer, and covering the seed to the proper depth.

The seed of grain crops is carried in a forward box, from whence it is scattered by an apparatus driven by rag-wheels and an endless chain belt.

When grass seed is also to be sown, it is carried in a box to the rear of the machine, and is delivered by a cam movement as wanted, and is strewn over the even and pulverized surface, thus being left in the best position to sprout when moistened by ensuing rain. The hand lever shown in the engraving as grasped by the right hand of the driver, acts through a toothed quadrant and a toothed segment to raise or lower the revolving harrow, and may be

fixed when the required depth is attained by notches in an arc provided for that purpose.

Foot levers serve to throw the harrow and seeding apparatus in or out of gear. The driver is thus enabled to control the operation of the machine without neglecting his driving, and this control, it is claimed, requires so little effort that a boy or an infirm man may perform it without undue fatigue.

This invention was patented through the Scientific American Patent Agency, May 4, 1869, by Augustin L. Taveau, of Chaptico, St. Mary's county, Maryland, to whom, or R. Sinclair & Co., Baltimore, Md., communications for State rights may be addressed.—*Scientific American.*

The United Draught of Horses.

HORSES will work much more evenly, and lose less of their effective force, by working abreast, than when they are placed in single file. If four horses are to draw a load on one wagon, it is better to have a long, double whiffle-tree, with a span of horses on each side of the tongue, than to have one span placed before the other.

Whenever one span of horses is hitched before another, if the leaders are hitched to the end of the tongue, it should be lowered to a horizontal position. Or a chain may extend from the whiffle-trees of the leaders to the hind end of the tongue. If the tongue is not horizontal, a large portion of the strain will bear like a heavy burden on the necks of the wheelers.

The best method of hitching a number of teams, one before the other, is to extend a long chain or rope from the leaders to the draught, and hitch the other teams to this by means of short chains.

In many instances a span of horses are hitched with a very short whiffle-tree before oxen wearing a long yoke. When ploughing with such a team, the effort of the horses will act in such a direction as to crowd the ox into the furrow.

When two or more teams of horses are hitched to one plow, the double whiffle-trees should all be equal in length. When horses and oxen are worked together, the yoke from the neck of one ox to the other, should be equal in length to the double-tree, from one staple to the other.—*Manufacturer and Builder.*

The *Tribune* has added to its numerous excellent departments, a new one, "*Horticulture and Market Gardening*," in which P. T. Quinn, Esq. is to appear regularly. We are pleased to see horticulture becoming thus popularized by the addition of competent practical horticulturists to the editorial staff of our largest agricultural and rural journals, and this new branch in *The Tribune* will "*bring forth good fruit.*"

COTTON CULTURE.

The following letter from Mr. James Bancroft, on Cotton Culture, was read by Mr. W. M. Lawton, before the annual convention of the South Carolina Agricultural and Mechanical Society, held in Columbia, S. C., on November 12th last :

ATHENS, GA., November, 5, 1869.

Wm. M. Lawton, Esq., Charleston, S. C.

Dear Sir : Your valued favor of 13th ult., has been received. You have an erroneous impression with regard to my planting and raising cotton by myself. Allow me to correct the error, and say that my son, Edward Bancroft, and myself are jointly interested in farming at this place. He has the immediate charge of our planting operations ; my part is of a more general nature.

We consult together on all matters, and agree that deep plowing and carefully preparing the land before planting, is of the greatest importance. After the plants are up and growing, there should be no more deep culture. The subsequent work should be only on the surface with such implements as will prevent the grass and weeds from growing, thereby allowing all the strength of the land for the benefit of the growing crop. Cultivators of the soil should commence to destroy the grass and weeds before they make their appearance above ground, and allow nothing but the crop to grow at any time.

This part of the country is not so favorably situated for raising cotton as that more southerly ; still, notwithstanding this, men of experience in planting consider the results of our crops as quite successful.

On our small farm situated in the town of Athens, in 1868 we raised two bales of clean cotton of 440 pounds each to the acre, the land originally very poor. On the same ground in 1869, we are making only half a crop, say one bale of cotton per acre.—The failure is caused by the unusually severe drouth of last summer, as the blooms of July only made fruit, while all subsequent blooms were dried up and failed to mature the bolls.

When we say that we have been reading agricultural books, papers, etc., for over forty years and now have on hand a small library on the same subject, we may be called book farmers.

We have read of some old farmers who consider book farming as poisonous to the land, but so far in our limited practice, we have no particular reason to fear any very serious or injurious results from reading books.

In 1852 we purchased a volume called the *American Muck Book*, by Browne, and published by C. M. Saxton, New York. This book contains a great deal of valuable information on all kinds of manure, with full directions for mixing various ingredients,

called "special manures," consisting of Peruvian guano, gypsum, common salt, bones in various forms, soot, lime, woodashes, nitre, charcoal, etc.

We have used special manures, as well as home-made. Each are valuable for all kinds of plants.

Home-made manure (called "gold dust") from earth closets, well fed horses, and other animals, no doubt, is of best quality for general purposes.—"Gold dust" should be protected from the influence of the sun, rain and wind, and when wanted for use, it should be covered up immediately with soil to prevent loss by exposure to the atmosphere.

Originally we planted the Dickson Cotton Seed. These have been greatly improved by Edward Bancroft, who has personally selected seed for the past three years from the best and most prolific plants ; by this means we are able to have the best and most improved cotton seed.

There can be but little or no doubt that the Southern States are behind the age in agricultural pursuits, but we trust from the present appearances that a change will soon be made in the right direction, and that rapid improvements will soon follow.

The soil should be plowed deep, fertilizers used freely, and the land "thoroughly underdrained." By such means, with careful and strict attention, there must, and will be, very great improvement and increase in all the crops of the country.

Our land generally seems to lack vegetable matter. The best and easiest way to fill the soil with it, and at the same time enrich the land, is by growing green crops of cow peas, clover, grain or grass, and when in the right condition, turn the whole under with a good two-horse plow. In this way two crops of cow peas (the clover of the South,) can be grown and turned under in one season.

Land can be used and made profitable all the year round.

We have been engaged for many days lately clearing off corn-stalks (with the intention of composting them) from land where a crop of corn has recently been harvested. This same land has been plowed, harrowed and sowed with small grain for the purpose of turning under a green crop next spring, at which time a cotton crop or a late corn crop can be planted, thus making the land work in the winter. Such things cannot be done in the Northern States and this shows the advantages of the Southern States for agricultural purposes, and we may say equally good, if not better, reasons may be given for establishing manufactures in the South.

Yours, very truly, JAMES BANCROFT.

Tobacco is a native of Virginia.
The nettle is a native of Europe.
The citron is a native of Greece.
The pine is a native of America.
The poppy originated in the East.

REMARKS ON TRANSPLANTING.

The following timely hints we glean from the new catalogue of William Parry, of Cinnaminson, New Jersey, very high authority in such matters:

The holes should be dug large enough to receive the roots without bending, and the tree should be planted as deep as it previously grew in the Nursery. Examine the roots, and cut off all wounded parts, paring the wound smooth with a sharp knife. Hold the tree upright, and extend the roots in their natural position, and cover them carefully with pulverized soil, which should be brought in contact with every fibre, so as to leave no hollows or cavities among the roots. Pour in a pail of water, which has a tendency to settle the earth and retain moisture around the roots, after which throw on a little more surface soil to prevent its baking, and leave it a little hollow to collect the rain.

Stake the tree and tie it carefully to prevent the wind from shaking it, which greatly retards the young roots from striking in the ground.

Mulch by laying around it four or five feet in width, and three inches in depth, covering of some kind. Rough manure, straw, leaves or old hay will do. This gives an equal temperature and preserves a uniform moisture about the roots, which is very important.

Young Orchards should be cultivated for several years and have vegetables grown therein, in preference to grain or grass.

The proper seasons for transplanting are March and April, in Spring, and October and November in Autumn. For fruit trees the soil should be dry, either naturally, or made so by thorough drainage, as they will not live or thrive on a soil constantly saturated with stagnant moisture. To insure a good growth of fruit trees, land should be in as good condition as for a crop of wheat, corn, or potatoes.

Treatment of Trees or Plants that have been frozen in the Packages, or received during frosty weather.—Place the packages unopened in a cellar or some such place, cool but free from frost, until perfectly thawed, when they can be unpacked, and either planted or placed in a trench, covering the roots well up the stems, with earth until convenient to plant. Treated thus, they will not be injured by the freezing. Trees or Plants procured in the Fall for Spring planting, should be laid in trenches in a slanting position to avoid the winds; the situation should be sheltered, the soil dry, and the roots well covered with earth. A mulching on the roots, and a few evergreen boughs over the tops, will afford good protection.

The specific gravity of millstones per cubic foot is 157 pounds.

TOP-DRESSING FOR CORN.

A correspondent in the *Germanstown Telegraph* offers the following as a top-dressing for corn:

Having been much benefited by the following mixture, and believing it to be the province of your paper to disseminate the results of experiments, I have concluded to submit it to your judgment.

Having used various substances as a top-dressing for corn, such as guano, super-phosphate, salt or plaster, also various mixtures of them, I have found the following to give the best result for the expenditure:

A short time before planting time, I collect all the chicken manure, and reduce it to as fine a powder as possible, and pass it through a riddle. With this I mix two bushels of bone dust, two of dry (unleached) wood ashes, one and a half of plaster, and a peck of coarse salt; the heap is then shoveled until thoroughly mixed, and if dry and dusty may be moistened with water or urine. If mixed long before using, the heap should be spread out and covered with dry soil or else it will heat and lose part of its virtue.

I apply the mixture at the rate of one handful to two or three hills, and find the above quantities enough for ten or twelve acres.

TURNIPS.—It is surprising that the round flat (commonly called English) turnips, so palatable and nutritive, is so seldom found on many of our farmer's tables. It must be that the farmer does not understand their worth and the small cost of raising them, and we recently heard a farmer say they did not cost him more than three cents per bushel, and as a feed for stock they are fully equal to potatoes, and from an acre you can get 800 bushels of turnips, if they do well, while the yield of potatoes would not be more than one-half as much.—The white turnip may be a successful crop after wheat has been cut, sowed among the corn, as is adopted by some farmers, but is not favored by me, as it prevents the corn ripening and filling out.—J. L. HERSEY, in *Germanstown Telegraph*.

ROSES AND CAMELIAS IN WINTER IN WINDOWS.—Those who grow Camellias must supply them moderately with tepid water when in flower, and for those out of flower, the warmest position must be given to induce them to make an early growth.—Sponge the leaves weekly, to keep them clean, and to prevent the accumulation of dust upon them.

Roses in pots for the window must be frequently syringed, and fumigated when necessary; there are many who do not pay sufficient attention to this point, and therefore their success is not what their industry would otherwise deserve.—*Gard. Weekly*.

DIFFICULTIES AND ABUSES OF MARKETING FARM PRODUCE.

The Committee on Trade Abuses reported progress, through Mr. Lyman, to the American Institute Farmer's Club of New York, as follows:

Your Committee, in an endeavor to discharge the duty assigned to them of suggesting relief from certain wrongs and abuses in the disposing of farm produce in this metropolis, report that the subject is one of great embarrassment, as well as of great importance. We find that the country supports a large army of brokers; go-betweens, agents, or middlemen, who make sometimes a precarious living, and sometimes excessive gains by handling produce. In the matter of apples, as an instance, thousands of barrels come to the city and sell for \$2.75 and \$3, or \$3 50. They are re-packed, and, after rejecting a few of the smaller ones, the most of what remain are sold at \$5. We cannot but deem it an injustice that a few hundred men should make half as much, and sometimes fully as much, by selling the apple crop that comes to New-York, as the thousands of anxious, hard-working farmers who plant the trees, tend the orchards, pick the fruit and send it to market. So in the article of butter. The up-town consumer pays from ten to fifteen cents, often twenty cents more than the butter brings at first hands.—There are those who think these are matters of trade, and must be regulated by the laws of supply and demand. To show the fallacy of this position, we submit an instance from the practice of a neighboring city. This butter I bought from the farmer who made it. He sells every week, on Wednesdays and Saturdays, at stand No. 555 in the Farmers' Market, Philadelphia. In that city there are no intermediaries, through whose hands the butter slides like the monkey's cheese, losing a nibble on one side and a bite on the other till the farmer finds himself paid in skim-milk and the middleman in cream. If a farmer near Philadelphia makes such butter as this, he sells directly to the consumer. If his make commands a dollar a pound, as this does, he and not the merchant gets the profit. Yet Philadelphia is a great city. The most of its butter is brought thirty, forty and sixty miles to market. In handling some kinds of produce there are practices which we cannot say are just or legal. For instance, when an article like rhubarb is sent, the handler has been known to cull the lot, sell the choice at twenty and twenty-four cents a package, get rid of the leavings at sixteen cents, and return sale to the farmer at sixteen cents for the whole. The practice of returning to the farmer only what the smallest or the poorest of a lot has brought is quite common. The farmer can get about as much for a second-rate article as he can for a choice product, because the middleman generally pockets that difference, and says nothing. On the other hand there are foul practices which cannot be sufficiently reprobated—farmers who fill two-thirds of a barrel with small apples and top out with big fruit, men who put old butter at the bottom of a tub, who water milk and dilute vinegar. This we reprobate just as much as we do the grasping and the trickery of non-producers.

Farmers often, very often, ship to a man who does not make it a business to dispose of the article sent. For instance, butter is shipped to a flour merchant, eggs to a fish dealer, poultry to a potato man, or cheese to a hardware house. There is no cure for this but information on the part of the farmer.—

Large dealers and those who live near generally obtain this knowledge; but those who live afar, who read our weekly papers and work hard, who must make every edge cut and every ham tell, whose farms are carpeted with mortgages, and whose families are large, how can they be expected to know all the ins and outs of New York; all the tricks of trade; all the wiles of the adversary? I have heard of an instance which will illustrate the machinations that are set for the unwary step. A farmer from New Jersey some years ago came into the New York market, and by honest deal, built up a wide business. Evil men envied him, and conspired to recommend as a book-keeper a man of singular ability in forcing a balance, no matter what the figures might be. It worked, and the honest Jerseyman was shorn of his hard-won thousands, while the ring chuckled. Such are some of the abuses in the New York market system. Your committee has no sure cure, no patent medicine for these ills. But we wish to fix the attention of farmers to the subject that they may combine for their protection.—We recommend: 1. A thoroughly honest packing on the part of the producer; no decayed potatoes with the sound; no frowsy butter in the pail with good; no light weights; no weeds in clover hay; no thick plank at the bottom of the half-bushel. 2. Let the farmer inform himself as to the houses that make a special business of handling what he has to ship, and be reasonably sure of their solvency and good repute. 3. Your committee recommend that farmers form clubs in every considerable village, and send their most vigilant and capable man, paying his car fare, if necessary, and requesting him to inform himself accurately of the best men in the produce and marketing business. 4. There is need of some bureau or committee, or commissioner of some description, whose business it should be to give such representatives of farmers' unions the information they need. In a city where it is reputed that every man has his price—where offence's gilded hand may shove by justice—the farmers may find it difficult to secure a friend too keen to be hoodwinked, not afraid to speak a wholesome, though unwelcome truth—too lofty to soil his fingers with a percentage; but the producing class of this country need such friends more than they need a Senator or a Minister to the Court of St. James.

PRESERVING HYACINTH BULBS.—As soon as the flowers wither, take the bulb out of the earth or water in which it has bloomed, wash it and the roots clean, and lay it on the lid of a hamper, or on clean straw, in an airy, shaded, but dry place. Turn the bulb frequently, and when the roots and leaves, &c., have dried up, trim them off, remove loose scales, and ripe offsets, and when the bulb is perfectly dry, lay it by in a drawer, closet or basket until the following autumn. By this method, the exhaustion of the bulb, after flowering, is saved.—*Gerald Smyth.*

Wise men Advertise!
Shrewd business men Advertise!
Enterprising storekeepers Advertise!
To succeed in business Advertise!
A cure for dull times—Advertise!
The way to make business—Advertise!
To resuscitate sinking fortunes—Advertise!

The Poultry House.

BREEDS OF POULTRY.

The Farmer's Breed for Profit.

Every poultry fancier has his choice of breeds; and as he breeds only to sell occasionally pairs or trios at a fancy price, it is necessary that he keep the breeds pure and unmixed. But the farmer who breeds for eggs and flesh requires in the bird he breeds hardihood, early maturity, good layers, good form and size, as well as flesh not too coarse.

The Bolton Grays give the most eggs, are very hardy, but they lack size.

The Black Spanish are handsome, productive in eggs, but tender and small as compared with many others.

The Game fowls are of the best quality of flesh, but small, and only fair layers. They are, however, vigorous and active, and for those who are just settling in a new and wild section they are just the breed to have, because they are courageous and will protect themselves against the birds and animals of prey.

The Polands and the Hamburgs are ornamental, suited well to the yard of a suburban amateur fancier. They are prolific of eggs, but the bodies are small and the flesh is deficient in rich juiciness, no matter how well fed and fattened they are.

The Creve Cœurs are fine birds of good size, but not quite hardy enough for the lofts and open sheds usually given to the use of poultry by the generality of farmers.

The Houdans are more hardy, of good, fair size; prolific as layers, but poor setters and bad mothers. These two last named breeds are disposed to roam as much as the game fowl.

The White Dorkings are handsome, but few can be found of any size or hardihood. As generally found they have been so much bred in-and-in that they are small, say not above four pounds to the hens and six pounds for cocks, and tender as regards rearing of the chicks.

The colored Dorkings when well bred, by due crossing, are large, well formed delicate grained flesh, good layers, hardy, and come the earliest to maturity of any breed known. If they have been bred in-and-in for some time, the size will often be retained, but the young chicks from such in-and-in bred birds are difficult to raise.

The Dominiques are next to the colored Dorkings in value, nearly as large, and, unless the Dorkings have been well bred, are more hardy. They are good layers, good mothers, and the chicks easily raised.

The Cochins are large, very hardy, good layers and setters, but they so lack in plumpness on the breast, and the flesh is so coarse and stringy in old fowls, that it detracts very much from their value as birds for the amateur's table or for market sales.

The Brahmas are like the Cochins, large—very large—but of better form, not so long in the leg, very hardy, good layers,—especially in the winter—good setters and mothers, and the young chicks are easily reared; but, like the Cochins, the flesh, of the old birds especially, is coarse and stringy, fit for no purpose but the tables of low-priced boarding houses.

The Farmer's Breed is the breed for profit. It consists of Brahma hens and colored Dorking cocks; the chicks from which are hardy, easily reared, grow fast, and in four months, without extra feed, will dress four to five pounds each of fine-grained, well-formed, plump-breast, well-colored flesh, fit for the table of any amateur or epicure, and always commanding a good price in market. The hens from this cross are even better and more continuous layers than either pure Brahma or the Dorking. but if wanted to breed again, the farmer must keep one coop separate of Brahmas—say a cock and two hens—and so also of the Dorkings, and thus yearly with the cross of pure bred birds, cocks of the Dorkings and hens of the Brahmas, keep up the "*Farmer's Breed for profit.*"—A. THORN, in *Rural New Yorker*.

THE SIZE OF ROOSTING-POLES.—At a good farmer's recently we noticed he had very large poles as a perch for his hens. They were we should think, four or five inches through. He regarded them as much better than smaller sized ones from the fact that the foot was more extended, every part was brought to bear upon it in a natural position, and was therefore better kept warm, than when cramped upon a smaller pole.—*Maine Farmer*.

WHEAT GERMS VITAL FOR 2,600 YEARS —A head of Egyptian seven-headed wheat, grown in Essex, England, from seed found in the wrappings of an Egyptian Mummy, *twenty-six hundred years old*, was shown us last week by John Park of Gates, Monroe Co. It was like the pictures we see of this curious grain produced in the days of Joseph and Pharaoh, and just brought from England by Mr. Park. He also showed a peck of splendid Essex wheat, of full, round golden berry, bursting with its snowy contents, which he proposes to sow for seed.

BOOK FARMING —Those who think our cultivated lands must grow poor as they grow old, will find food for reflection in the fact, that not many years back the average yield of wheat per acre in England was about ten bushels—it is now over thirty bushels. Brains accomplished it.

Reported for *Ellicott City Times*.

Fifth District (Howard County,) Farmers' Club.

CLARKSVILLE, MD., Jan. 25, 1870.

In pursuance of the call of the Committee of Organization, the attendance at Clarksville on Saturday, January 22d, for the purpose of organizing the Fifth District Farmers' Club, was unusually large, comprising all the most prominent members of the community. After calling the meeting to order, D. Lawrence, as Chairman of the Committee, made the following remarks:

"Gentlemen—That a clear understanding may be entertained by all in regard to the cause of our assembling this evening, the nature of the call and the objects to be accomplished, I will read the same for the benefit of all:

"For the purpose of advancing our interests, we, the undersigned, hereby announce our purpose of forming a Farmers' Club, and pledge for the same our presence and support.

Samuel Gaither,
Thos. G. Watkins,
Basil Johnson,
John A. Clarke,
Wm. W. Iglehart,
John T. Hardy,
D. Lawrence,
Upton W. Dorsey,
Samuel Hopkins,
J. K. Gaither,
Horatio Johnson,

B. F. Nichols,
Artemus Johnson,
John S. Watkins,
J. Morris,
R. F. Warfield,
James Harban,
Thad. C. Clark,
C. B. Trepp,
Martin H. Batson,
Thos. H. Brown,
Wm. Clark,

Wm. S. Linchicum.

"Comprising a representation of the wealth, intelligence and respectability of the community, united in one body to act as one for the advancement of mutual interest. We find upon looking around us that the different commercial and industrial interests have instituted organizations among themselves for their own advancement and protection; and self-protection with many of those bodies means the disadvantage of the farmer to a greater or less degree, and to counteract so far as possible the difficulties under which the farmer is compelled to prosecute his duties, not only in consequence of these combinations, but others no less formidable, it becomes not only a duty but a necessity for him to make use of every effort to secure himself from fraud and extortion, and also to lighten his burdens by the use of such means as consultation and the experience of others shall place within his reach. As an intellectual nucleus, also around which to rally the best elements of the community and arrest the social immorality exhibited, more or less by every community, an Association of this kind cannot fail to be a powerful agent for good for the elevation of society in opposition to those agents engaged in its destruction. In its relation to the farmer and his farm we shall find, as one of its legitimate results a higher order of agriculture and improved tillage upon every hand. Instead of hedgerows a rod wide, filled with briar, sassafras and persimmon wood, we shall see a fence occupying the smallest possible space of ground, with the grass growing rich and green around it. Instead of large fields brown in their barrenness, we shall see the golden glory of the ripening grain lifting its well-filled head to sun and air, with the full promise of an abundant yield, and with the bright prospect of improvement before us upon every hand, and in every respect we shall be justified in giving to this movement our energetic action and our sincere devotion."

The following gentlemen were then elected permanent Officers of the organization.

President—Girard Hopkins.

Secretary—D. Lawrence

Treasurer—Samuel Gaither.

On motion a committee on Constitution and By Laws was appointed, consisting of Messrs. James Morris, T. S. Clark, M. H. Batson, J. S. Watkins, B. F. Nichols and D. Lawrence, who are to report on Jan. 29th at a meeting to be held at Ellicott City.

The Secretary then read a call for a Mass Meeting of the Farmers, to be held at Ellicott City, on Saturday, Feb. 5, to form a County Agricultural Association and to take some action in regard to Public Roads and their repair. A delegation of twenty were appointed to attend said meeting.

Permit me before closing, Mr. Editor, to cordially request the remaining Districts to assemble at the meeting on Feb. 5, in mass or as the Delegates of organized bodies. In addition to the County Association, each District should have its own local organization to reach and benefit individuals who could not be affected by a County Association.

It cannot be denied that there exists as much necessity among farmers for head work as hand work. Argument upon this point is useless to intelligent minds, and the in-

fluence of a monthly meeting in each District for an interchange of views in regard to the application of head work would soon be felt in the complete renovation of the county and the occupation of that high ground to which by position it is justly entitled. Hitherto there has been some excuse for dissipation in the absence of counteracting moral agencies, but now the brightness of a new morning breaks upon us, and we call upon every man to come forth into that light which is the truth, and assist in placing the agricultural interests of the county upon a basis which shall endure so long as it shall assist in raising bread for the nations.

D. L.

At the meeting held on the 5th, of Feb. at Ellicott City, the following call was adopted and signed by the farmers present, representing six Districts of the county:

We, the undersigned, Farmers of Howard county, respectfully recommend to our fellow farmers throughout the county to assemble in primary meetings, at the usual places of holding such meetings, on Saturday, 19th inst. at 10 o'clock, A. M., for the purpose of sending twenty-five Delegates to a county Convention to be held at the Court House in Ellicott City, on Tuesday, the 23d inst., for devising means for our mutual benefit and protection.

COAL ASHES AS A FERTILIZER.—A "Subscriber" inquires of the *Working Farmer* why "coal ashes are poisonous to vegetation?" The interrogation is not a fair one. Coal ashes are *not* injurious to vegetation. Indeed, on some kinds of soil, a top-dressing will sometimes produce three tons of grass per acre, where the crop was very light the year previous. We have seen coal ashes applied as a top dressing to both heavy and light soils, with excellent results. Where clay predominates in the soil, a heavy dressing of coal ashes will be one of the best kinds of fertilizers for strawberries. Coal ashes will not injure any kind of crops. The best manner of disposing of them is to sift them over lawns and gardens, as soon as they are removed from heaters or stoves. When deposited in large heaps in a back yard, they frequently become a nuisance. It will pay to cart them a mile to scatter around fruit trees of any kind. The growing roots of trees and plants will extract such material as may be required for their development, even when chemists by careful analysis, fail to find any valuable ingredients in such fertilizers.

MEXICAN COFFEE.—Some samples of the new crop of coffee from a plantation near Colima, Mexico, have lately been received at San Francisco. It is said to be the best in the world. There are 4,000 trees. Coffee from this plantation took a premium at the Paris Exposition. The grains are small, very full, many of them nearly round, and of a light green color. There are 600 acres under cultivation at this place. Sugar, rice, tobacco, cocoa, indigo, beans, oranges, lemons, limes, cocoanuts, bananas and plantains are also produced. The plantation is valued at \$40,000, gold.

SHEEP that are not more than six years old will cut so closely with their teeth that kernels of grain can always be thoroughly masticated. For this reason it will not pay to grind grain for sheep.

Ladies Department.

OVER THE RIVER.

Over the river they beckon to me—
 Loved ones who've crossed to the further side;
 The gleams of their snowy robes I see,
 But their voices are drowned in the rushing tide.
 There's one with ringlets of sunny gold,
 And eyes the reflection of heaven's blue—
 He crossed in the twilight gray and cold,
 And the pale mist hid him from moral view.
 We saw not the angels that met him there;
 The gate of the city we could not see—
 Over the river over the river,
 My brother stands waiting to welcome me!
 Over the river the boatman pale
 Carried another—the household pet;
 Her brown curls waved in the gentle gale—
 Darling Minnie! I see her yet!
 She crossed on her bosom her dimpled hands,
 And fearlessly entered the phantom bark—
 We watched it glide from the silver sands,
 And all our sunshine grew strangely dark.
 We know she is safe on the other side,
 Where all the ransomed angels be;
 Over the river, the mystic river,
 My childhood's idol is waiting for me,
 For none return from those quiet shores,
 Who cross with the boatman cold and pale;
 We hear the dip of the golden oars,
 And catch a glimpse of the snowy sail,
 And lo! they have passed from our yearning hearts,
 They cross the stream and are gone for ay;
 We may not sunder the veil apart
 That hides from our vision the gates of day.
 We only know that their barks no more
 Sail with us o'er life's stormy sea;
 Yet somewhere, I know, on the unseen shore,
 They watch, and beckon, and wait for me.
 And I sit and think, when the sunset's gold
 Is flushing river, and hill, and shore,
 I shall one day stand by the water cold,
 And list for the sounding of the boatman's oar;
 I shall watch for a gleam of the flapping sail;
 I shall hear the boat as it nears the strand;
 I shall pass from sight with the boatman pale,
 To the better shore of the spirit land;
 I shall know the loved who have gone before,
 And joyfully sweet will the meeting be—
 When over the river, the mystic river,
 The Angel of Death shall carry me.

THE TRUE WIFE.

The death of a true wife is beautifully drawn in the annexed portrait by Channing. "Her reserve and shrinking delicacy threw a veil over her beautiful character. She was little known beyond her home; but there she silently spread around her that soft, pure light, the preciousness of which is never fully understood; till it is quenched. Her calm, gentle wisdom, her sweet humility, her sympathy, which, though tender, was too serene to disturb her clear perception fit her to act instinctively; and without the consciousness of either party, on his more sanguine ardent mind. She was truly a spirit of good, diffusing a tranquilizing influence mildly, to be thought of, and therefore more sure. The blow which took her from him, left a wound which time could not heal. Had his strength been continued, so that he could have gone from the house of mourning to the haunts of poverty, he would have escaped for a good part of the day, the sense of his bereavement. But the few minutes walk in the street now sent him wearied home. There the hovering eye which had so long brightened at his entrance was to shed its mild beam on him no more. There the voice that daily inquired into his labors, and like another conscience had whispered a sweet approval was still. There the sympathy which had pressed with tender hand his aching head and by

its nursing care had postponed the hour of exhaustion and disease, had gone. He was not indeed left alone; for filial love and reverence spared no soothing offices; but these, though felt and spoken of as most precious, could not take the place of what had been removed. This great loss produced no burst of grief. It was still, deep sorrow, the feeling of a mighty void, the last burden which the spirit can cast off. His attachment to life from this moment sensibly declined. In seasons of peculiar sensibility he wished to be gone. He kept near him the likeness of his departed friend, and spoke to me more than once of the solace which he had found in it. He heard her voice from another world, and his anticipation of that world, always very strong, became more vivid and touching."

THE EMPTY CRADLE.

The death of a little child is to the mother's heart like dew on a plant from which a bud has perished. The plant lifts up its head in freshened greenness to the morning light; so the mother's soul gathers from the dark sorrow through which she has passed, a fresh brightening of her heavenly hopes.

As she bends over the empty cradle, and in fancy brings her sweet infant before her, a ray of divine light is on the cherub face. It is her son still, but with the seal of immortality on his brow. She feels that heaven was the only atmosphere where her precious flower could unfold without spot or blemish, and she would not recall the lost. But the anniversary of his departure seems to bring his spiritual presence near her. She indulges in that tender grief which soothes, like an opiate in pain all her passages and cares of life. The world to her is no longer filled with a human love and hope—in the future, so glorious with heavenly love and joy, she has treasures of happiness which the worldly, unchastened heart never conceived.

The bright fresh flowers with which she decorated her room, the apartment where the infant died are emblems of the far brighter hopes now drawing on her day dream. She thinks of the glory and beauty of the New Jerusalem. And she knows her infant is there, in that world of eternal bliss. She has marked one passage in that book—to her emphatically the World of Life—now lying closed on the toilette table, which she daily reads—*Suffer little children, and forbid them not, to come unto me, for of such is the kingdom of heaven.*

ONE of three things is certain. Either the American woman possesses a stronger constitution than she has the credit of possessing, or else all our ideas of protecting the body from the changes which belong to our variable climate are, and always have been, unnecessary, or it must follow that the present fashion of exposing the throat and chest to the sudden changes which belong to our climate must, ere long, develop an unusual number of bronchial affections. But even if this is not the result of this hideous fashion, we should imagine that its indecency would prevent all women who possess the least idea of moral or artistic beauty from conforming to it. Lack of modesty in dress is intolerable in all places, and on all occasions—but apart from this fact, dressing one's self in a manner unsuited to the occasion, or to the place, is a mistake which no woman gifted with ordinary sense should make. Trailing a party dress through the dirt of a public thoroughfare would be no more ridiculous than is the corsage which is worn on the street, and which exposes the chest to the gaze of every passer-by.

Celery originated in Germany.
 The chestnut came from Italy.
 The Onion originated in Egypt.

THE HOUSEHOLD.

HINTS ABOUT HOUSEKEEPING.—We will give to intellect, to religion and to all virtues, the honor that belongs to them.—And still it may be boldly affirmed that economy, taste, skill and neatness in the kitchen have a great deal to do in making life happy and prosperous.

Nor is it indispensably necessary that a house should be filled with luxuries. The qualifications for all good housekeeping can be displayed as well on a small scale as on a large one.

A small house can be more easily kept than a palace. Economy is most needed in the absence of abundance.

Taste is as well displayed in placing the dishes on a pine table, as well as in arranging the folds of a damask curtain.

Skilful cooking is as readily discovered, in a nicely baked potato, or a respectable johnny cake, as in a nut brown sirlon or a brace of canvass backs.

The charm of good housekeeping, is in the order of economy and taste displayed in attention to little things have a wonderful influence.

A dirty kitchen and bad cooking have driven many a one from home to seek for comfort and happiness somewhere else.

Domestic economy is a science—a theory of life which all sensible women ought to study and practice. None of our excellent girls are fit to be married until they are thoroughly educated in the deep and profound mysteries of the kitchen.

See to it, all ye who are mothers, that your daughters are all accomplished by an experimental knowledge of good housekeeping.—*BETTIE, in Germantown Telegraph.*

A FEW HINTS TO HOUSEKEEPERS.—Housekeepers should remember that coffee which is purchased already roasted, should be kept in a close tin chest; that tea, to preserve its full flavor, should also have the air excluded; that cakes should likewise be kept in a tin box with a tightfitting top, and they will keep it fresh three times as long as if left exposed. Bread preserved in the same way, never need be stale, so much dreaded by young persons with strong digestive powers. That cranberries—just now making their appearance, and as fine as I ever saw—will keep the whole winter if placed in a sweet vessel with water in a place where the water will not freeze much. Good, fresh rice has a clear, bright look; old rice is frequently infested with a black insect which eats into and buries itself in the grain. In laying up your stock of lard for the winter, choose that for the longest keeping from hogs over one year old; that from young hogs should be used first. In making "sour crout," first scald out the cask, place a few leaves in the bottom, then a layer of the cut cabbage, then stamp gently until the juice appears, then another layer until the cask is full; each layer should have as much fine salt as can be grasped in the hand. When the cask is full another topping of cabbage leaves, then place a board, loosely fitting, upon the top, and on top of that a stone of sufficient weight to press it down properly. Stand away in the cellar. Remember, that in making sour crout everything must be perfectly clean and sweet, just as much so as in making bread and pies.—*Correspondent Germantown Telegraph.*

SOUTH CAROLINA AGRICULTURAL AND MECHANICAL SOCIETY.—Through the politeness of Thos. G. Clemson, Esq., we have received the proceedings of the Annual Convention of this Society, held in Columbia, S. C., November 10th to 12th, 1869. It contains an address by the President—an interesting report on Fertilizers—report on the cultivation of Cotton—report on Corn Culture—report Pisciculture—report on Improved Agricultural Implements—report on the necessity of Scientific and Practical Education, treating on a great variety of subjects of a highly interesting character—together with transactions of the Convention. Johnson Hagood, Esq., president, D. Wyatt Aiken, Esq., secretary.

DOMESTIC RECIPES.

POTATOES.—The best way to cook Irish potatoes, is to pare and put them in a pot, with just boiling water enough to prevent their burning, and a little salt. Cover them tight, and let them stew till you can stick a fork through them easily. If any water remains in the pot, turn it off, put the pot where it will keep moderately warm, and let the potatoes steam a few moments longer. The easiest way to cook them, is to put them in boiling water, with the skins on, and boiled constantly till done. They will not be mealy if they lie soaking in the water without boiling. They are more mealy to peel them as soon as tender and then put back in the pot without any water, and set in a warm place where they will steam, with the lid of the pot off. Old and poor potatoes are best boiling till soft, then peeled and mashed fine, with a little salt, butter, and very little milk put in—then put into a dish, smoothed over with a knife, a little flour sprinkled over it, and put where it will brown. Cold mashed, or whole boiled potatoes, are nice cut in slices, and fried with just butter or lard enough to prevent their burning. When brown on both sides, take them up, salt and butter them. Most potatoes will boil in the course of half an hour—new ones will boil in less time. Sweet potatoes are better baked than boiled.

TURNIPS.—White turnips require about as much boiling as potatoes. When tender, take them up, peel and mash them—season them with a little salt and butter. Yellow turnips require about two hours boiling—if very large, split them in two. The tops of white turnips make a good salad.

BEETS.—Beets should not be cut or scraped before they are boiled, or the juice will run out, and make them insipid. In summer, they will boil in an hour—in winter, it takes three hours to boil them tender. The tops in summer are good boiled for greens. Boiled beets cut in slices, and put in cold spiced vinegar for several days, are very nice.

PARSNIPS AND CARROTS.—Wash them, and split them in two—lay them in a stew pan, with the flat side down, turn on boiling water enough to cover them—boil them till tender, then take them up, and take off the skin, and butter them. Many cooks boil them whole, but it is not a good plan, as the outside gets done too much before the inside is cooked sufficiently. Cold boiled parsnips are good cut in slices, and fried brown.

ONIONS.—Peel and put them in boiling milk, (water will do, but it is not as good.) When boiled tender, take them up, salt them and turn a little melted butter over them.

ARTICHOKES.—Scrape and put them in boiling water, with a table spoonful of salt to a couple of dozen. When boiled tender, (which will be in about two hours,) take them up, salt and butter each one.

SQUASHES.—Summer squashes, if very young, may be boiled whole—if they should be pared, quartered, and the seeds taken out. When boiled very tender, take them up, put them in a strong cloth, and press out all the water—mash them, salt and butter them to your taste. The neck part of the squash is the best. Cut it in narrow strips, take off the rind, and boil the squash in salt and water till tender—then drain off the water, and let the pumpkin steam over a moderate fire for ten or twelve minutes. It is good not mashed—if mashed, add a little butter.

EGG PLANT.—Boil them a few moments to extract the bitter taste—then cut them in thick slices; sprinkle a little salt between each slice. Let them lie half an hour—then fry them till brown, in lard.

CULTIVATION OF INDIAN CORN.

Corn is a cereal which requires a deep soil to produce a large crop. The plowing should therefore be deep and well done. I have generally found two yoke of oxen to make the best team; for two years I have used two yoke of oxen to a heavy plow for turning the first furrow and one yoke to a light subsoil plow to follow them, without throwing the soil out of the furrow, but simply to loosen it up.

Do not be afraid of turning up "that yaller stuff," but if the subsoil is cold and clayey, it is better to not bring too much of it to the surface; in this case the depth must be increased by degrees.

If the soil is stiff, let the field be first harrowed around and around the way the plow went, diagonally in both directions, and lastly backward and forward, parallel to the longest side.

If the corn is to be put in with hoes, mark out with a plow across the face of the hill, if the ground is rolling; then select a good, stiff pole twelve feet long, four feet from each end attach two ox-chains, which should have one end dragging on the ground. Let a man and boy or two boys take each an end of the pole, and pass up the fence, at right angles to the marking out of the plow, take care to keep the chain next the fence parallel to the same, and about four feet distant. In coming back, the end of the pole should be kept over the last chain mark. A common ox-chain, say ten feet long, will make a plain mark if the ground is in proper order.

Cover the corn carefully, and never more than from $1\frac{1}{2}$ to 2 inches deep. If planted deeper than this, it will be longer coming up, and after it comes up it will grow very well until it is three or four inches high, when it will remain stationary for ten days or two weeks. By examining we will find that the first joint is below the surface of the soil, also that the roots are decaying, while new ones are being thrown out from the joint; these new roots require some ten or fifteen days for their complete formation, and during this time the plant remains stationary as far as growth is concerned. As soon as the new roots are fully formed the old ones will entirely disappear, and the growth will proceed as usual.

From actual experiments with grains taken from the same ear and same part of the ear, I have arrived at the following result: Corn planted 1 inch deep came up in eight days; that planted $1\frac{1}{2}$ inches deep required nine and a half days; that 2 inches deep, ten days; $2\frac{1}{2}$ inches deep, eleven and a quarter days; 3 inches deep, twelve days; $3\frac{1}{2}$ inches deep, thirteen days; 4 inches deep, fourteen and a half days; $5\frac{1}{2}$ inches deep, eighteen days; 6 inches deep, twenty-one days. The last lot came up and grew until about three inches high, when it remained stationary for a long time and finally died.

As soon as the rows are visible, the hoe-harrow should be passed twice in the middle of the row, but should not go too near the corn until it is three or four inches high. When the corn is about six inches high, remove the right-hand back-tooth of the hoe-harrow, and substitute for it a piece of boiler plate shaped like the mould-board of a plow. This will hill the corn but not so high as if done with a plow.

Do not work the corn when the ground is too wet, for nothing is gained by it. Work it often and well, for it will be a good investment. As soon as the corn is large enough to be broken by the swingletree, the latter should be shortened to

one foot or eighteen inches.—GEORGE P. RODGERS, in *Germantown Telegraph*.

RECEIVED.

From John Vanderbilt & Bros., New York, retail price list of Garden, Flower and Field Seeds; Agricultural Implements, Fertilizers, &c.

From R. H. Allen & Co., New York, circular of the Anti-Riction and other improved Lever and Railway Horse-powers. Also from the same, retail priced catalogue of Vegetables, Flower, Fruit, Herb and Field Seeds. Illustrated.

From Robert J. Halliday, Baltimore, wholesale trade circular of Camillas, Azaleas, Roses and Budding Plants for 1870.

From Hoopes Bro. & Thomas, West Chester, Pa. Annual Trade List of the Cherry Hill Nurseries for 1870.—Josiah Hoopes is the author of "The Book of Evergreens"—illustrated—price \$3.

From J. M. Thorburn & Co., New York, Annual Descriptive catalogue of Flower Seeds, with practical directions for their culture and treatment—also, a choice list of beautiful French Hybrid Gladiolus, and other spring Bulbous Roots.

From John Saul, Washington, D. C., Descriptive Catalogue of New, Rare and Beautiful Plants, such as Dahlias, Chrysanthemums, Geraniums, Fuchsias, Carnations, Verbenas, Phloxes, &c., for spring of 1870. This very complete catalogue can be had by addressing as above.

From William Parry, Pomona Nursery and Fruit Farm, Cinnaminson, New Jersey, his Descriptive and Illustrated catalogue of Fruit and Ornamental Trees, Vines and Plants, embracing every variety of large and small fruits, with directions for transplanting and cultivation. Our friends should send for one of their catalogues to the above address.

THE MANUFACTURER AND BUILDER.—This elegant monthly should be in the hands of every Mechanic, Architect, Builder, Engineer, Carpenter, Machinist, and skilled workman in the country. It comprises 32 three column pages—beautifully printed and numerous illustrations.—Only \$1.50 per year. Western & Company, 37 Park Row, New York. Every worker should subscribe.

THE WESTERN POMOLOGIST.—The first Number of this monthly has been received. It is well conducted and printed by Mark Miller and J. A. Nash, Des Moines—price \$1 per year.

FOURTH GRAND STATE FAIR OF LOUISIANA.—The Mechanic's and Agricultural Fair Association of Louisiana, will hold its Fair, commencing April 23d, 1870, at the grounds of the Association in the city of New Orleans, and continue nine days. Its List of Premiums is on the most liberal scale, and \$5,000 have been set apart for objects of special interest, not provided for in the published list. For List of Premiums, &c., address Luther Homes, Esq. Secretary and Treasurer, New Orleans.

LEONARD SCOTT COMPANY, New York. The Westminster Review, American Edition for January 1870—\$4 per annum. Also The Edinburgh Review, for January 1870—\$4 per annum.

THE COUNTRY GENTLEMAN.—This sterling agricultural weekly comes to us greatly enlarged and improved. For the last third of a century it has held rank as one of the best journals devoted to agriculture and its kindred sciences in this or any other country. We rejoice at the great success of this old standard, which has been secured by great labor and expenditure by our friends Luther Tucker & Son, editors, Albany, New York, who furnish it yearly at \$2.50, and cheap at double the price. Who will not subscribe?

THE MISSISSIPPI AGRICULTURIST.—The first number of this monthly, devoted to the interests of the Southern farmer and mechanic, is received. It is edited by S. C. Theilgard & Co., Meridian, Miss., at \$1 per year.

BEECHER'S MAGAZINE—for the Manhood of America. This is a new magazine published by J. A. Beecher, Trenton, N. J., at \$1 per year. It bids fair to take a prominent place in our periodical literature.

"THE GULF STATES."—The February No. of this new monthly, devoted to Agriculture, Horticulture, &c., received. It is conducted with great ability by E. F. Russell and D. Redmond, published in New Orleans, La., at \$2 per annum.

BALTIMORE MARKETS---Feb. 22.

Prepared for the "MARYLAND FARMER" by JOHN MERRYNAN & Co., BALTIMORE.

[Unless when otherwise specified the prices are wholesale.]

ASHES—Pot \$7.25@7.50.
BEESWAX—Western 34; Southern 35 cts.
COFFEE.—Rio in lots 9½@15 cts., gold, as to quality.
COTTON.—Low Middling 23¼@23½ cts.; Middling, 24¼@25¼ cts; Ordinary and Good Ordinary 23@24 cts. The market quiet and dull.
FEATHERS.—Common to mixed 45 cts. per lb.; prime live geese, 80 cts.
FISH.—No. 1 Bay mackerel \$26@28; No. 2 \$16@17.50; No. 3, large, very scarce \$13@14.50; medium \$9.50@10.50; Labrador herring \$7.00@8.00; gibbed \$4.50@5.50; Codfish \$5.50@6.50, per 100 lbs.; Hake scarce, \$3.00@3.25.

FLOUR—

Howard Street Super	4.52½ @	\$ 5.00
" Shipping Extra	5.12 @	5.25
" High Grades	5.50 @	5.62½
" Family	6.12½ @	7.00
Western Winter Super	4.75 @	5.00
" Shipping Extra	5.25 @	5.50
" Choice Extra	5.50 @	5.62½
" Family	6.25 @	6.50
Northwestern Super	4.75 @	5.00
do Extra	5.00 @	5.00
City Mills Super	5.00 @	5.75
" Standard Extra	5.50 @	6.00
" Shipping brands Extra	5.75 @	6.00
Patapsco, Horicon, Reservoir and Weyerton Family	0.00 @	0.00
G. W. Legg's Family	0.00 @	0.00
Union Mills Acme Family	0.00 @	0.00
Greenfield Family	0.00 @	9.50
James S. Welch's Family	0.00 @	0.00
Baltimore High grade Extra	0.00 @	8.75
Ashland Family	0.00 @	0.00
Lingane	0.00 @	0.00
Rye Flour	4.50 @	5.00
Corn Meal—City Mills	4.75 @	0.00
Buckwheat—New York	3.50 @	4.50
Peninsula	0.00 @	0.00

FERTILIZERS—

Peruvian Guano	\$90@95	¥ ton	of 2000 lbs.
Orchilla and Rodonda	30	¥ ton	"
Turner's Excelsior	65	¥ ton	"
Turner's Ammo. S. Phos.	55	¥ ton	"
E. F. Coe's Ammo. S. Phos.	55	¥ ton	"
Soluble Pacific Guano	60	¥ ton	"
Redonda Guano	30	¥ ton	"
Flour of Bone	60	¥ ton	"
Andrew Coe's Super-phosphate	60	¥ ton	"
Baugh's Raw Bone S. Phos.	56	¥ ton	"
Baugh's Chicago Blood Manure	50	¥ ton	"
" Bone Fertilizer	46	¥ ton	"
Zeli's Raw Bone Phosphate	56	¥ ton	"
Rhodes' do	50	¥ ton	"
Mapes' do	50	¥ ton	"
Bone Dust	45	¥ ton	"
Horne's Bone Dust	45	¥ ton	"
Dissolved Bones	60	¥ ton	"
Baynes' Fertilizer	40	¥ ton	"
" Fine Ground Bone	45	¥ ton	"
"A" Mexican Guano	30	¥ ton	"
" do do	30	¥ ton	"
Moro Phillips' Super-Phosphate	56	¥ ton	"
Berger & Burtz's S. Phos. of Lime	56	¥ ton	"
Whann's Raw Bone Super Phos.	56	¥ ton	"
Md. Fertilizing & Manufacturing Co's Ammoniated Super-Phosphate	.55	¥ ton	
Fine Ground Bone Phosphates	.30	¥ ton	
Plaster	\$2.25	¥ bbl.	
Sulphuric acid, 3 cts.	¥ lb.		(Carboy \$3.)
Nitrate of Soda (refined Saltpetre)	6¼ cts.	per lb	in kegs of 100 lbs.

GRAIN.—Wheat—Maryland choice red \$1.40@1.45; prime red \$1.30@1.35; good do. \$1.20@1.25; ordinary \$0.00; white \$1.01@1.15. Corn—94@95 cts.; yellow 93 cts. to \$1. Oats—53@60 cts. weight. Rye—90@99 cts.
HAY AND STRAW.—Penna. Timothy, baled, \$23@24; Rye Straw dull, \$2 per ton.
MILL FEED.—Brown Stuff 22@23 cts; Middlings 23@32 cts., per bushel.

MOLASSES—Porto Rico, 45@60 cts; Cuba clayed 40@45 cts; E. Island 30@50 cts. New Orleans 00@00; Muscovado 43@46 cts.

POTATOES.—Sales at wharves of Jersey and Maryland at 60@65 cts.

PROVISIONS.—Bacon Shoulders, packed, 12¼@12½ cts. sides 14¼ cts; clear rib do. 16¼@16½ cts; plain hams, 15@16 cts.; sugar-cured 19@20 cts.

SALT.—Fine \$2 60@2 80, per sack; ground alum \$1.65@1.75; Turks Island 50@51 cts., per bushel.

SEED.—Clover, \$8.20@8.50; Timothy \$4 75@00; Flax, \$2 20

SUGAR.—Cuba 10@10½; Porto Rico 10½@10½; Demarara 11½@13½; English Island 10@11½ cts.

TOBACCO—

Maryland—frosted to common	\$ 5.00@	\$ 5.50
" sound common	7.00@	8.00
" good do	8.00@	9.00
" middling	9.50@	11.00
" good to fine brown	11.50@	15.00
" fancy	17.00@	30.00
" upper country	7.00@	35.00
" ground leaves, new	5.00@	11.00
Ohio—Inferior to good common	4.00@	6.00
" brown and greenish	6.00@	8.00
" good and fine red and spangled	00.00@	00.00
" medium and fine red	9.00@	12.00
" common to medium spangled	7.00@	10.00
" fine spangled	12.00@	25.00
" fine yellow and fancy	00.00@	00.00
Kentucky—common to good lugs	8.00@	9.50
" common to medium leaf	10.00@	12.50
" good to fine	13.00@	14.00
" select leaf	15.50@	18.00
WOOL.—Unwashed, 30@33 cts; burry 28@30 cts; tub washed 48@51 cts; pulled 10@15 cts.		
WHISKEY.—97@99 cts.		

WEBSTER'S DICTIONARY.—"The best" dictionary now published is the new illustrated edition of Webster's Unabridged. It is really the best edition ever published—and no professional man, merchant, mechanic or farmer should be without a copy, as they will find it a complete encyclopaedia of knowledge. No library is complete without it, and if you have no other book it is a library of itself, if you will include the Bible. It contains 10,000 words and meanings not in other Dictionaries, and is illustrated with 3,000 engravings. Published by G. & C. Merriam, Springfield, Mass., and sold by all booksellers at \$12. See advertisement.

BUFF COCHINS.—We call attention to the advertisement of Benjamin Hicks, of Roslyn, Long Island, who offers this choice breed for sale. We had consigned to us recently, for a friend, a trio of this breed of fowls, from imported stock, and they were the most perfect we have seen for sometime—large and handsome.

THE WORLD ALMANAC FOR 1870.—This valuable Almanac is published by the proprietor of the New York World, and contains a vast amount of useful information such as Election returns by States, Counties, Congressional and election districts—officers of the U. S. Government—crop Statistics, &c., &c.—price, postage paid, 20 cents—address "The World," 35 Park Row, N. Y.

PRINTERS' CIRCULAR.—A record of Typography, Literature, Arts and Science. Edited by R. S. Menamin, Philadelphia, at \$1 per year. It should be in the hands of every printer and others interested in that line.

Pomona Nursery. 30 Years.

Kentucky Strawberry, Colossal Asparagus. Everybody can have the benefit of 30 years experience in my new descriptive Catalogue of 56 pages for 10 cents. It tells what and when to plant.

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